

DOCUMENT RESUME

ED 319 186

EC 230 875

AUTHOR Moore, Mary T.; Steele, Diane
TITLE The Relationship between Chapter 1 and Special Education Services for Mildly Handicapped Students: A Substudy of the National Assessment of Chapter 1.
INSTITUTION Decision Resources Corp., Washington, DC.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE Nov 88
CONTRACT 400-85-1008
NOTE 95p.
PUB TYPE Reports - Descriptive (141) -- Statistical Data (110)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Demography; *Economically Disadvantaged; *Educational Legislation; Elementary Education; Eligibility; *Federal Legislation; Handicap Identification; *Mild Disabilities; *Program Evaluation; *Program Implementation; *Student Placement.
IDENTIFIERS *Education Consolidation and Improvement Act 1981

ABSTRACT

This report presents nationally representative data to contrast and compare programs developed under Chapter 1 of the Education Consolidation and Improvement Act of 1981 with special education programs for mildly handicapped pupils in elementary schools, called for by Part B of the Education of the Handicapped Act. The report describes differences between the schools and percentage of students served by each program, and the services provided by each program. It also contains information about schools' provision of dual services to students eligible for both programs, and efforts to coordinate the operation of both programs within the school. The first chapter is titled "The Distribution of Special Education Services for Mildly Handicapped Students" and addresses the distribution of special education services among districts, schools, and grades, especially as this distribution compares with that of Chapter 1 programs. Chapter 2 covers "Enrollment and Identification of Mildly Handicapped and Chapter 1 Students." The third chapter is titled "Instructional Services for Mildly Handicapped Students" and focuses on instructional setting, time and content, and teacher characteristics. The final chapter offers conclusions regarding contrasts and interactions between mildly handicapped and Chapter 1 student services. Includes 22 references. (PB)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

**The Relationship Between Chapter 1 and
Special Education Services for Mildly Handicapped
Students: A Substudy of the National
Assessment of Chapter 1**

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to improve
reproduction quality.

Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

**Mary T. Moore
Diane Steele**

November 1988

BEST COPY AVAILABLE

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Mary T. Moore

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

**The Relationship Between Chapter 1 and Special
Education Services for Mildly Handicapped Students:
A Substudy of the National Assessment of Chapter 1**

**Mary T. Moore
Diane Steele**

November 1988

This research was conducted under Contract #400-85-1008. The opinions expressed here do not necessarily reflect those of the Department of Education.

PREFACE

The National Assessment of Chapter 1 was mandated by Congress in December, 1983. The mandate, included in the Technical Amendments to the Education Consolidation and Improvement Act (ECIA) of 1981, required the National Institute of Education (NIE)¹ to conduct independent studies and analyses, and to report the findings to Congress. The final report, entitled *The Current Operation of the Chapter 1 Program (1987)*, addresses a broad range of topics regarding Chapter 1 programs nationwide, and presents data from surveys and case study interviews in school districts and states conducted specifically for the National Assessment. As part of that effort, data were also gathered on programs for mildly handicapped students, through both surveys of school principals and teachers of mildly handicapped students as well as through case study interviews.

¹On October 1, 1985, NIE was reorganized into the Office of Educational Research and Improvement (OERI) within the U.S. Department of Education (ED).

EXECUTIVE SUMMARY

Chapter 1 of the Education Consolidation and Improvement Act of 1981 (Chapter 1) and Part B of the Education of the Handicapped Act (EHA-B) are the two largest federal education assistance programs providing services to students who require educational assistance beyond the regular classroom. These two programs are designed to serve students whose educational needs derive from different sources. The federal Chapter 1 program provides supplemental financial assistance to districts for those educationally disadvantaged pupils who reside in low income school attendance areas. EHA-B requires districts to provide appropriate special education and related services to all students with physical, sensory, or mental handicapping conditions defined in the law. EHA-B provides financial assistance to states and districts to help support these services.

These major distinctions between the programs are reinforced by additional differences in the program design features contained in the federal legislation and regulations that guide each program. The EHA-B program establishes an individual right to special education services for each child identified as handicapped, and a multifaceted process for identifying a pupil as handicapped, developing an Individualized Education Plan, and placing him or her in an appropriate program. In contrast, Chapter 1 provides supplementary instructional help to those educationally disadvantaged children who are the most needy within eligible school attendance areas. Districts are not obligated to serve all Chapter 1 eligible students but only those whom resources permit. Moreover, the federal Chapter 1 legislation does not specify multifaceted identification procedures, but rather requires districts to select students within eligible schools on the basis of uniformly applied measures of achievement, as determined by the district.

Because both programs serve children who generally experience achievement difficulties in school, there has been interest on the part of policy makers for information about the relationship between the two programs. Federal requirements prohibit the exclusion of children from Chapter 1 solely on the basis of their handicapping conditions, while at the same time they prohibit the use of Chapter 1 funds to provide federally mandated special education services for handicapped students (the supplement, not supplant rule). As a result, school administrators must determine those children who require EHA-B special education services, and those who are eligible for Chapter 1 assistance because their educational problems are primarily the result of economic disadvantage.

The relationship between the two programs is especially important as regards mildly handicapped students. As defined in this report, these students include those who are learning disabled, mildly mentally retarded, or mildly emotionally disturbed. Past research suggests that school officials may encounter problems in distinguishing between those children whose difficulties stem from factors within the child, and those that are attributable to the environmental deficits associated with poverty (Shephard et al., 1983; Ysseldyke et al., 1982).

Beyond compliance with the legal provisions related to Chapter 1 and EHA-B services, issues emerge regarding the extent to which school-level services reflect the different concepts of intervention expressed in the two federal statutes. For example, how do selection procedures, minutes of daily instruction and size of instructional

groups compare for each program? How do the years' experience and training of the teachers attached to each program compare?

This report presents recent, nationally representative data to contrast and compare Chapter 1 and special education programs for mildly handicapped pupils in elementary schools. The report describes differences between the schools and percentage of students served by each program, and the services provided by each program. It also contains information about schools' provision of dual services to students eligible for both programs, and efforts to coordinate the operation of both programs within the school building. The major findings include:

- o Services for mildly handicapped students are found in 85 percent of the nation's public elementary schools, while Chapter 1 programs are found in 75 percent of the nation's public elementary schools. Sixty-five percent of public elementary schools offer both programs.
- o Programs for mildly handicapped students are spread evenly across schools regardless of poverty and urbanicity, unlike Chapter 1 programs which tend to be concentrated in high poverty schools and urban and rural schools.
- o The stability of the percentage of mildly handicapped students across schools suggests that districts are not using Chapter 1 programs in place of special education for mildly handicapped students in schools.
- o Neither school poverty or urbanicity influences the typical percentage of students enrolled in special education services for mildly handicapped pupils.
- o Selection processes used to place mildly handicapped students in special education programs rely on a battery of multiple measures (diagnostic tests, standardized tests, and teacher recommendations), while Chapter 1 selections are based on only a few measures (standardized test scores and teacher judgement).
- o Slightly over 40 percent of elementary schools offering both programs report that some students receive services for mildly handicapped students and Chapter 1 services. Case studies show that school officials frequently attempt to minimize the number of pupils who actually participate in more than one program.
- o Services for mildly handicapped pupils are characterized by smaller instructional groups, more minutes of instruction, and fewer students assigned to teachers than are Chapter 1 programs. Pullout as opposed to regular classroom approaches predominate in both programs.

TABLE OF CONTENTS

	<u>Page</u>
PREFACE	i
EXECUTIVE SUMMARY	ii
INTRODUCTION	1
Purpose of this Study	4
Sources of Data	4
Major Findings of this Report	6
Note on Terminology	6
Organization of the Report	7
CHAPTER 1. THE DISTRIBUTION OF SPECIAL EDUCATION SERVICES FOR MILDLY HANDICAPPED STUDENTS	8
District and School Distributions	8
Grade Level Distributions of Special Education Services for MH Students	11
CHAPTER 2. ENROLLMENT AND IDENTIFICATION OF MILDLY HANDICAPPED AND CHAPTER 1 STUDENTS	13
Percent of Students Enrolled in Services for Mildly Handicapped Pupils	13
Chapter 1's Influence on the Percent of MH Students Receiving Special Education Services	15
Selection Procedures for MH Students	16
Dual Services for MH and Chapter 1 Pupils	19
Sequential Program Participation	22
CHAPTER 3. INSTRUCTIONAL SERVICES FOR MILDLY HANDICAPPED STUDENTS	23
Instructional Setting	23
Instructional Time and Content	25
Characteristics of Teachers	28
The Influence of Chapter 1, School Poverty, and School Urbanicity on Instructional Characteristics of MH Services	28
CHAPTER 4. CONCLUSIONS	35
Contrasts in Services to Mildly Handicapped Students and Chapter 1 Students	35
Interactions Between Special Education Services for MH Students and Chapter 1 Programs	36
Summary	37
REFERENCES	39

Contents (continued)

	<u>Page</u>
Appendix A. Description of School Survey, District Survey, and Study of Targeting Practices	A-1
Appendix B. Technical Appendix	B-1

LIST OF TABLES

	<u>Page</u>
Table 1. Selection Procedures for MH and Chapter 1 Programs, 1985-86	17
Table 2. Settings for Special Education Services for Mildly Handicapped Students	24
Table 3. Characteristics of MH and Chapter 1 Instructional Services as Reported by Teachers, 1985-86	26
Table 4. MH and Chapter 1 Teachers Reports of the Purpose of MH and Chapter 1 Instruction, 1985-86	27
Table 5. Use of Aides by Teachers of MH Students, Chapter 1 Teachers, and Regular Classroom Teachers	29
Table 6. Teachers' Educational Attainment and Years of Experience in Teaching, 1985-86	30
Table 7. Instructional Characteristics of MH Reading Programs by Chapter 1 Status, Poverty and Urbanicity of the School, 1985-86	31
Table 8. Instructional Characteristics of Chapter 1 Reading Programs by Poverty, and Urbanicity of the School, 1985-86	32
Table 9. Characteristics of MH Programs in Rural Schools and Nationally, 1985-86	34

LIST OF FIGURES

	<u>Page</u>
Figure 1. Presence of Special Education Services for Mildly Handicapped Students and Chapter 1 Programs in Public Elementary Schools by School Poverty Quartile, 1985-86	9
Figure 2. Presence of Special Education Services for Mildly Handicapped Students and Chapter 1 Programs in Public Elementary Schools by School Urbanicity, 1985-86	10
Figure 3. Percentage of Public Elementary Schools Offering Special Education Services for MH Students and Chapter 1 Programs by Grade, 1985-86	12
Figure 4. Median Percentage of Public Elementary Students Receiving Special Education Services for Mildly Handicapped Students and Chapter 1 Services by Grade as Reported by School Principals, 1985-86	14

THE RELATIONSHIP BETWEEN CHAPTER 1 PROGRAMS AND SPECIAL EDUCATION SERVICES FOR MILDLY HANDICAPPED STUDENTS

INTRODUCTION

The Chapter 1 program and Part B of the Education of the Handicapped Act (EHA-B) are the two largest federal assistance programs providing services to students who require special instructional help.¹ These two programs, however, are designed to serve students whose educational problems derive from different sources. The federal Chapter 1 program provides financial assistance to districts for educationally disadvantaged pupils residing in low income school attendance areas. The provisions of EHA-B require districts to provide appropriate special education and related services to students with physical, sensory, or mental handicapping conditions as defined in the law. EHA-B provides financial assistance to states and districts to help support these services.

These major distinctions between the programs are amplified by additional differences in the program design features contained in the federal legislation and regulations that guide each program. The EHA-B program establishes an individual right to special education services for each child identified as handicapped, and requires a multifaceted process for identifying a pupil as handicapped, developing an Individualized Education Plan, and placing him or her in an appropriate setting. In contrast, Chapter 1 provides supplementary instructional help to those educationally disadvantaged children who are the most needy within eligible school attendance areas. Districts are not obligated to serve all Chapter 1 eligible students but only those whom resources permit. Moreover, the federal Chapter 1 legislation does not specify multifaceted identification procedures, but rather requires districts to select students within eligible schools on the basis of uniformly applied measures of achievement, as determined by the district.

Policymakers have repeatedly expressed a desire for information about the relationship between these two major programs. Several concerns have generated their interest. Federal requirements related to non-discrimination and the use of Chapter 1 funds are one. On the one hand, Federal regulations implementing Section 504 of the

¹Federal funding levels for EHA-B amounted to \$1.3 billion in fiscal year 1987. In the same year total Chapter 1 funding was \$3.5 billion. Federal funds do not comprise the total of the funds expended for EHA-B. State and local funds provide the dominant share of dollars spent for special education. Chapter 1 serves approximately 11 percent of students aged 5 through 17, while special education programs serve 9 percent of pupils aged 6 through 17. (Birman et al., 1987; OSEP, 1988)

Rehabilitation Act of 1973 prohibit districts from excluding students from Chapter 1 solely because they have handicapping conditions. On the other, districts cannot use Chapter 1 funds to provide special education services to students identified as handicapped. The Chapter 1 supplement, not supplant provision prohibits the use of Chapter 1 funds for services that districts are otherwise required by law to provide. Special education services, as a result of the EHA-B requirements and related state laws, fall within the category of "services otherwise required by law." The combined effect of these legal provisions prohibits districts from excluding handicapped pupils yet demands care in identifying the source of pupils' problems in school and arranging proper funding for the services they receive.

These demands on districts assume particular importance with respect to students with mild handicapping conditions. These pupils include those who are learning disabled, mildly mentally retarded, or mildly emotionally disturbed.² Learning disabled students comprise the largest percentage of students with mild disabilities; in fact, learning disabled students account for 44 percent of the entire special education population in the nation, including students with severe and mild impairments. A major manifestation of learning disabilities is students' failure to make sufficient academic progress in school. In this respect, learning disabled pupils resemble educationally disadvantaged pupils eligible for Chapter 1 compensatory programs. In fact, some researchers report that children identified as learning disabled cannot be shown to differ from other low achievers with regard to a wide variety of school-related characteristics such as achievement, attendance, behavior, and language skills. (Gartner and Lipsky, 1987; Shephard et al., 1983, and Ysseldyke et al., 1982)

The availability of program resources at the school level may also influence the identification and selection of students for Chapter 1 compensatory services and for special education services. The intent of the Federal policies guiding each program is to ensure that students obtain the services they need from appropriate funding sources, but the striking increase in the number of pupils identified as learning disabled (142 percent from 1976-77 to 1986-87) prompts questions about whether some learning disabled students are low achievers who would be served by Chapter 1 compensatory programs if they attended schools with higher concentrations of poverty. Smith (1982) observes that learning disability is a "middle class condition," in which similar children

²It is important to note that not all students with learning disabilities or emotional disturbance have mild handicapping conditions. Some have severe handicapping conditions.

in schools with higher concentrations of poverty are classified as low achievers. The extent to which districts may direct a disproportionately greater share of special education resources to non-Chapter 1 schools and rely on Chapter 1 funds to meet the needs of similar children in Chapter 1 schools concerns Federal policymakers.

The recognition that a number of students may qualify for both compensatory and special education services has also spawned interest in the interaction between Chapter 1 and special education programs. In these instances, do districts provide students with dual services, or do school officials refrain on the grounds that participation in more than one special program fragments the student's overall educational experience (Kimbrough and Hill, 1982)? Birman (1979) found that school district personnel frequently attempt to minimize dual services for students to avoid problems with Federal supplement, not supplant requirements; to minimize fragmentation of a student's day; and to stretch available resources across a greater number of students. Relatedly, when dual services are provided, to what extent do teachers coordinate the instructional services provided under each program?

Linkages between the two programs are also of interest to Federal policymakers. For example, the source of a student's educational needs may not emerge until different forms of intervention are explored and the child's progress in a program is observed. Linkages between both Chapter 1 and special education programs may enhance the tools available to school officials both to assess and appropriately meet children's needs. More specifically, do districts use compensatory education programs as a pre-referral and/or post-special education treatment to meet the needs of individual students?

Issues such as these led both Federal program offices to issue a joint statement in July, 1987, encouraging State and local officials to undertake "greater effort in coordinating identification, evaluation, and program planning for students with special needs." Although the statement did not alter existing Federal requirements pertaining to the two programs, it reflected a recognition from the chief administrators of both programs that helping children with educational needs was a task requiring coordinated attention and a concerted effort.

A final area of concern stems from a concept both implicit and explicit in the separate legislation authorizing compensatory and special education programs: namely, pupils whose educational needs arise from different sources will require different types of services. The EHA-B program establishes a model of highly *individualized* services tailored to the needs of the student. In contrast, Chapter 1 programs support

supplemental instructional assistance designed to benefit *groups* of children who have educational deficits brought about by impoverished home and community environments. The extent to which districts and schools translate these differing Federal emphases into differences in the Chapter 1 and special education services provided to mildly handicapped pupils is a question worthy of further attention.

Purpose of this Study

The purpose of this study is to address many of the topics discussed in the previous paragraphs. The information contained in this report describes programs and services for mildly handicapped students, particularly as they compare with Chapter 1 programs and services. The report also analyzes ways in which the presence of Chapter 1 programs, school poverty levels, and school urbanicity influence the distribution and design of special education programs for mildly handicapped pupils. For the purpose of this report, mildly handicapped programs and services are defined as special education instructional programs (other than those provided by Chapter 1 funds) that serve children who are learning disabled, mildly retarded, or mildly emotionally disturbed.

This report is one of three additional analyses requested by Congress addressing the interrelationship of Chapter 1 with other programs designed to meet the special instructional needs of students. This study focuses on the relationship between Chapter 1 and special education services for the mildly handicapped population. The other two reports examine the interaction of Chapter 1 with State compensatory education programs, and with Federal and State programs for limited English proficient/language minority pupils.

Sources of Data

As part of the Congressionally mandated assessment of Chapter 1 conducted by the Department's Office of Research, several studies were commissioned to examine aspects of Chapter 1 programs at the district and school level. The Office of Special Education Programs contributed additional resources to extend the scope of these studies to allow exploration of some of the issues of overlap and coordination between Chapter 1 services and those provided to mildly handicapped students. During school year 1985-86, nationally representative survey information was collected from districts, schools, and teachers to describe the characteristics of Chapter 1 and its relationship to services for mildly handicapped students. The topics covered in these surveys

included characteristics of the schools offering each program, and the interaction between the programs within the schools. In addition, researchers conducted case studies of district and school level decisions regarding the design of Chapter 1 programs and student targeting under Chapter 1; a limited amount of information was also gathered on issues related to the interrelationship of Chapter 1 and special education programs in these areas. This report summarizes findings from these various sources.

The primary data source for this report is the 1985-86 National Survey of ECIA Chapter 1 Schools. Details about how these data were collected is provided in Appendix A of this report. It is important to note, however, that this survey defined the special education teachers who were interviewed in the survey as those who provided services to students who are "...learning disabled, mildly retarded, or mildly emotionally disturbed." Within this framework, respondents answered questions about the types of services they provide. Among the teachers chosen for the survey, 71 percent reported that the most common handicapping condition of the students they taught was learning disability; 9 percent cited emotional disturbance as the most common condition they taught; 8 percent reported mild retardation as the most common characteristic of this pupils; and 7 percent indicated speech. The remaining 5 percent were distributed across other health impairments.

The findings reported here are largely confined to elementary schools as a consequence of the design of surveys to reflect a national sample of elementary schools in the nation. This limitation is not particularly problematic since most Chapter 1 programs are concentrated at the elementary school level. Thus, issues related to program interaction are likely to be most prominent in elementary schools.

The survey data collected for the National Assessment of Chapter 1 and the commissioned case studies were necessarily limited in their capacity to cover all aspects of issues related to services for mildly handicapped students and Chapter 1. Because of the National Assessment's major responsibility to gather information about the operation of Chapter 1 programs, readers will find that while the information in this report extends available knowledge about the interaction between programs for mildly handicapped students and Chapter 1 programs, it does not address all issues related to this subject.

Major Findings of this Report

Among the major findings of this report are:

- o Services for mildly handicapped students are found in 85 percent of the nation's public elementary schools, while Chapter 1 programs are found in 75 percent of the nation's public elementary schools. Sixty-five percent of public elementary schools offer both programs.
- o Programs for mildly handicapped students are spread evenly across schools regardless of poverty and urbanicity, unlike Chapter 1 programs which tend to be concentrated in high poverty schools and urban and rural schools.
- o The stability of the percentage of mildly handicapped students across schools suggests that districts are not using Chapter 1 programs in place of special education for mildly handicapped students in schools.
- o Neither school poverty or urbanicity influences the typical percentage of students enrolled in special education services for mildly handicapped pupils.
- o Selection processes used to place mildly handicapped students in special education programs rely on a battery of multiple measures (diagnostic tests, standardized tests, and teacher recommendations), while Chapter 1 selections are based on only a few measures (standardized test scores and teacher judgement).
- o Slightly over 40 percent of elementary schools offering both programs report that some students receive services for mildly handicapped students and Chapter 1 services. Case studies show that school officials frequently attempt to minimize the number of pupils who actually participate in more than one program.
- o Services for mildly handicapped pupils are characterized by smaller instructional groups, more minutes of instruction, and fewer students assigned to teachers than are Chapter 1 programs. Pullout as opposed to regular classroom approaches predominate in both programs.

Note on Terminology

Throughout this report the term mildly handicapped is shortened to the acronym MH. The field of special education also uses the abbreviation MH to refer to students with multiple handicaps. Readers who may be initially confused by the MH designation should be aware that within the confines of this report it refers only to students with the mild handicapping conditions defined in the preceding paragraphs.

Organization of the Report

This report contains four sections. The first addresses the distribution of special education services among districts, schools, and grades, especially as this distribution compares with that of Chapter 1 programs. The second focuses on student selection issues, examining the enrollment levels and practices used to identify mildly handicapped students as compared with Chapter 1 students. Questions of dual service and coordination of services are also discussed in this chapter. The third section describes and compares various dimensions of instructional services provided by each program. Conclusions are presented in the final section.

CHAPTER 1

THE DISTRIBUTION OF SPECIAL EDUCATION SERVICES FOR MILDLY HANDICAPPED STUDENTS

District and School Distributions

Like Chapter 1 programs, special education services for students with mild handicapping (MH) conditions exist in the vast majority of districts and elementary schools in the nation. Seventy-eight percent of districts receiving Chapter 1 also report providing special programs for handicapped pupils.³ At the school level, 85 percent of all public elementary schools confirm the presence of special education services for students with mild handicaps. In comparison, 75 percent of all public elementary schools report Chapter 1 programs. The net result is that 65 percent of all elementary schools in the nation operate both Chapter 1 and MH programs.

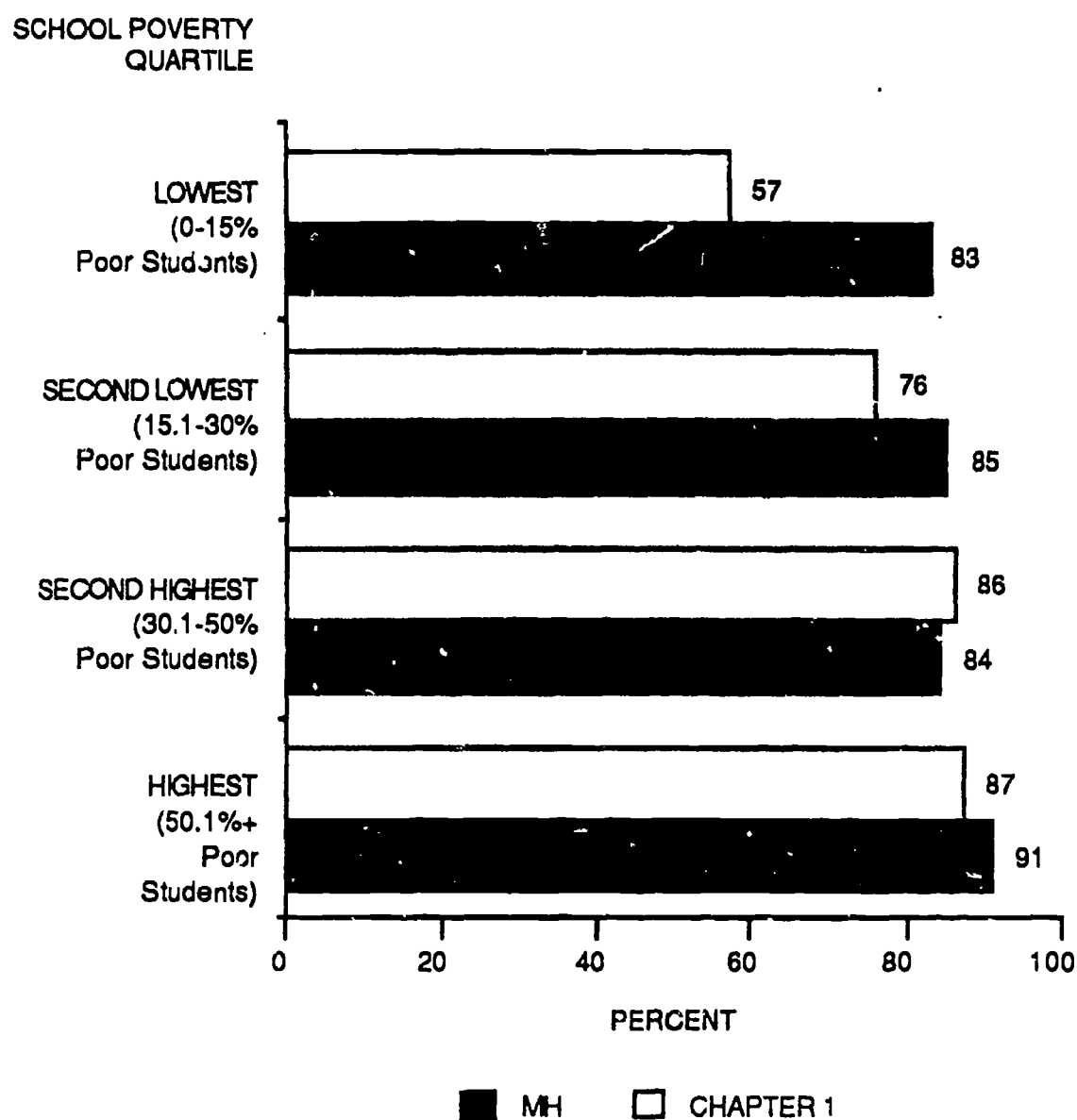
Programs for mildly handicapped students are present equally as often in schools providing Chapter 1 services as those not offering Chapter 1. Therefore, district decisions to place services from one source in a school appear to be independent of decisions to locate the other program in the same school. However, programs for mildly handicapped students differ from Chapter 1 in the types of schools they reach. The presence of services for mildly handicapped students is the same in elementary schools regardless of levels of poverty or urbanicity. The presence of Chapter 1 services, in contrast, because they are targeted on low achieving students in low income attendance areas, are more frequently found in schools with higher poverty levels, and less often in suburban schools (Figures 1 and 2).

These contrasts between MH and Chapter 1 programs reflect the different service strategies embodied in each program. Delivery of special education and related services for MH students is a right; these services must be provided to handicapped students regardless of which school in the district handicapped students attend. In contrast, students who receive Chapter 1 services do not have an entitlement to compensatory education; rather, such assistance is conditioned first by their living in a school

³Over 90 percent of all districts in the nation receive Chapter 1 funds. The 22 percent of Chapter 1 districts not reporting district-provided services for handicapped students are districts with very low pupil enrollments. These districts may not be violating Federal mandates for services to handicapped children since they may not have any handicapped pupils or they may be relying on services provided by intermediate education agencies or other districts.

FIGURE 1

Presence Of Special Education Services For Mildly Handicapped Students and Chapter 1 Programs In Public Elementary Schools By School Poverty Quartile, 1985-86



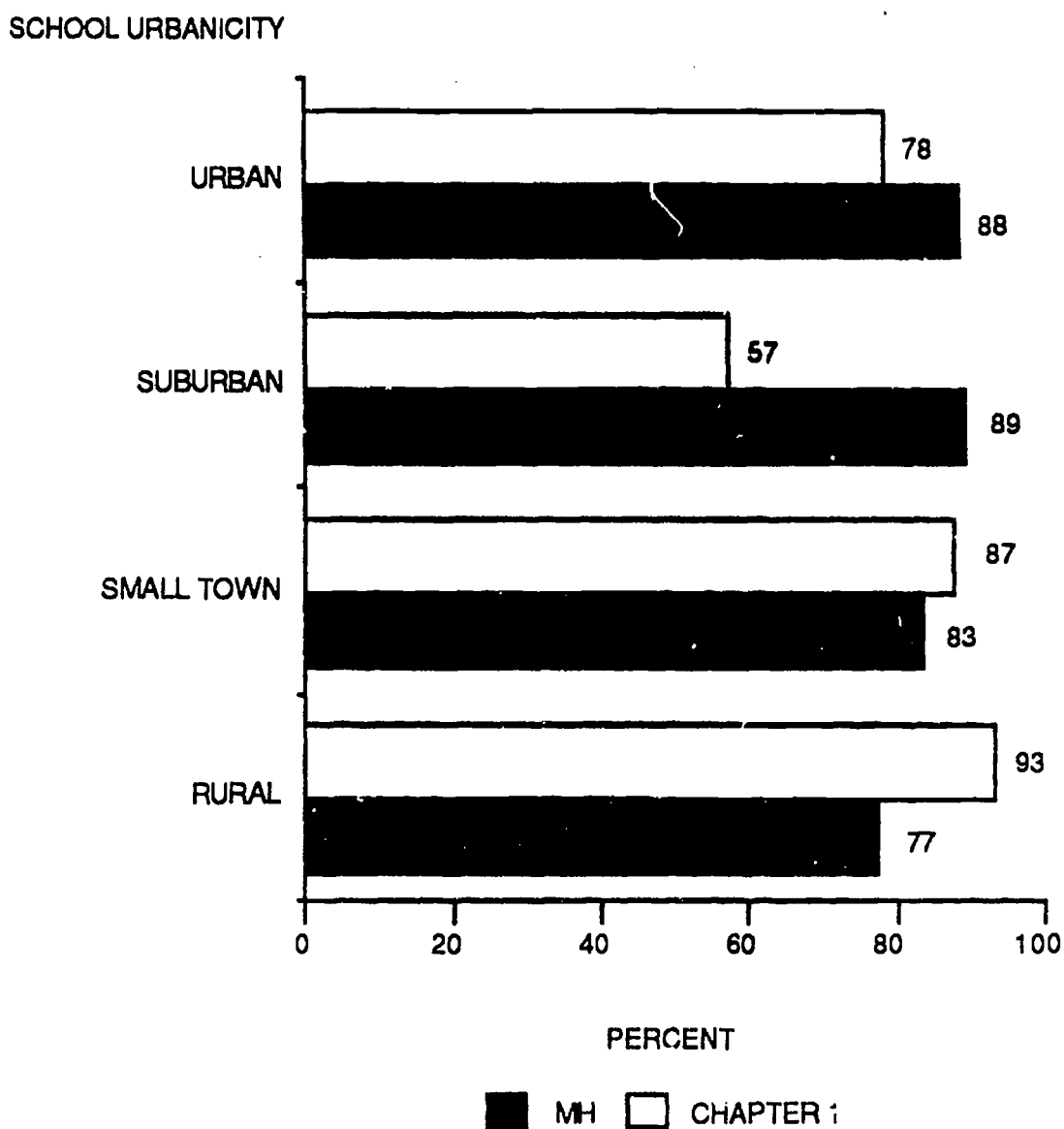
SOURCE: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Figure reads: Eighty-three percent of public elementary schools in the lowest poverty quartile provide services for MH students compared with 57 percent of schools in that quartile that provide Chapter 1 programs.

Note: School poverty classifications are based on principals' reports of the percentage of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

FIGURE 2

Presence Of Special Education Services For Mildly Handicapped Students And Chapter 1 Programs In Public Elementary Schools By School Urbanicity, 1985-86



SOURCE: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Figure reads: Eighty-eight percent of urban public elementary schools report services for MH students; 78 percent of urban public elementary schools report Chapter 1 programs.

attendance area that has a greater concentration of poverty than other school attendance areas in the district, and by their achievement level compared to other students in that school. These fundamental differences between the two programs result in a more even presence of services to the mildly handicapped across the school landscape than is true of the presence of Chapter 1 services. It should be noted, however, that the degree of school targeting achieved by Chapter 1 is only relative; other reports have emphasized the broad reach of Chapter 1 to districts and schools across the nation (Birman et al., 1987). In the next chapter, we examine the spread of MH and Chapter 1 services within schools as measured by the percentage of students enrolled in each program. At this point, however, we explore the presence of services for MH students and Chapter 1 programs in different elementary grades.

Grade Level Distributions of Special Education Services for MH Students

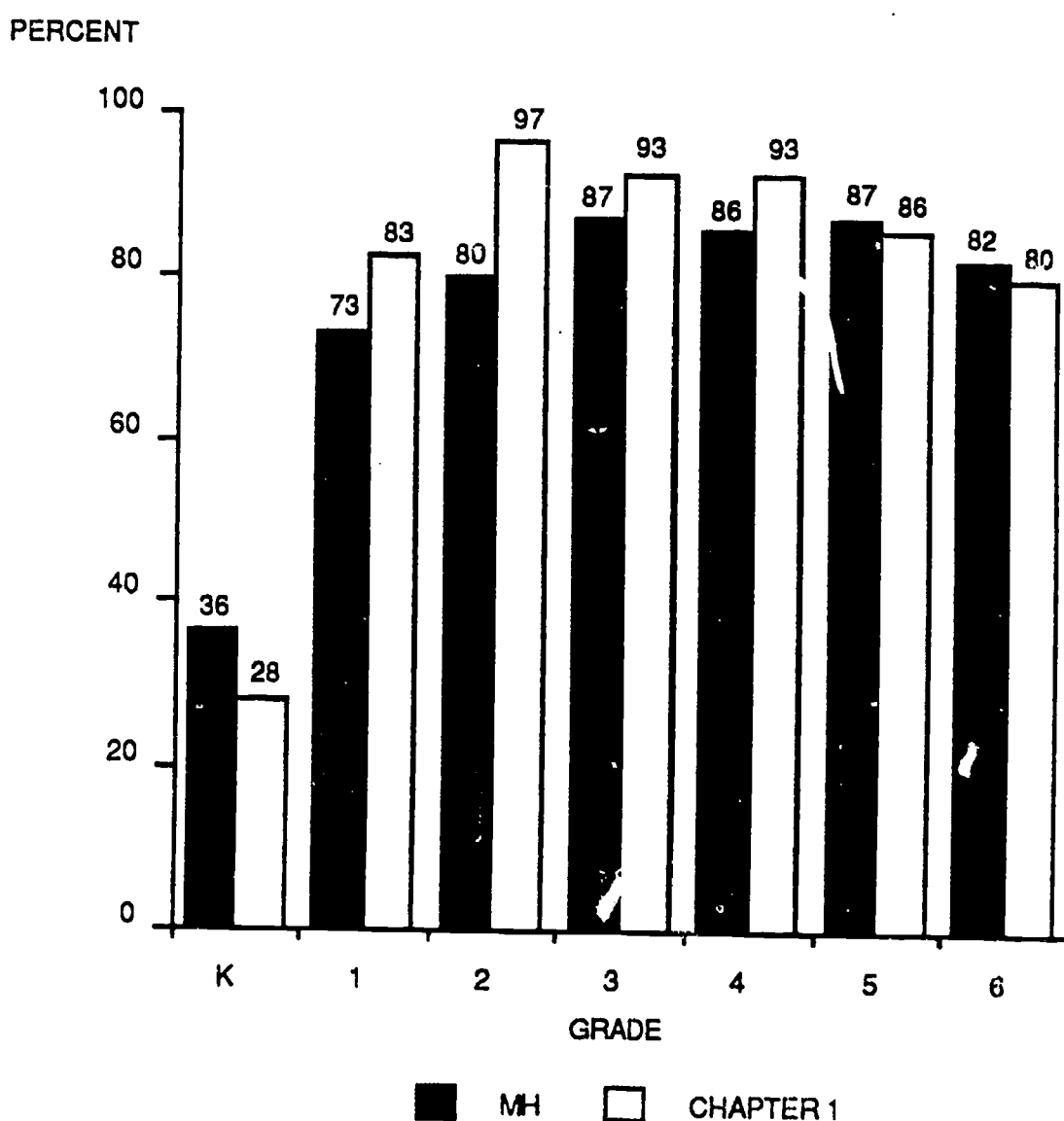
Programs for MH pupils at the elementary level are found in roughly the same proportions in grades 2 through 6 (Figure 3). Eighty percent and more of schools with programs for MH pupils report they provide services for MH youngsters in these grades. Grades K and 1, however, constitute an exception to the uniform distribution of MH programs. Only 36 percent of schools with MH programs report providing those services in kindergarten, and 73 percent report providing them in first grade.⁴

Chapter 1 programs in the elementary grades are also much less prevalent in kindergarten and are more likely to exist in grades 2 through 4 than in later elementary grades. Over 80 percent of elementary schools offering Chapter 1 do so in grades 1 through 6, and almost all schools with Chapter 1 offer it in grades 2 through 4.

⁴There is no explanation for the low percentage of schools providing services to MH kindergarten pupils. Other relevant sources of information indicate that a small percentage (6 percent) of all children receiving special education services fall in the 3 through 5 age category and most of these pupils had speech impairments as their primary handicap (OSEP, 1988). Since about 90 percent of elementary schools offer kindergarten, these data may suggest that districts centralize their kindergarten services for MH pupils in a portion of schools within the district.

FIGURE 3

**Percentage Of Public Elementary Schools Offering Services
For MH Students And Chapter 1 Programs By Grade, 1985-86**



SOURCE: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Figure reads: Thirty-six percent of public elementary schools with services for MH students reported offering those services in kindergarten; 28 percent of Chapter 1 schools reported offering Chapter 1 services in kindergarten.

CHAPTER 2

ENROLLMENT AND IDENTIFICATION OF MILDLY HANDICAPPED AND CHAPTER 1 STUDENTS

Percent of Students Enrolled in Services for Mildly Handicapped Pupils

Much like the presence of MH services across schools, the enrollment levels of mildly handicapped students do not vary substantially across elementary grades other than kindergarten. Elementary principals who administer schools delivering special education services to MH students typically report that, overall, 7 percent of their total student enrollment receives services for MH students.⁵ This pattern is mirrored somewhat in the enrollment levels for individual grades where typical enrollments in MH programs range from 3 to 7 percent in grades 1 through 6, with median enrollment percentages increasing as the grade level increases (Figure 4).⁶

Chapter 1 enrollment levels in the elementary grades differ in two respects from MH enrollment levels. First, the typical percentage of students enrolled in Chapter 1 in each grade consistently exceeds the percentage enrolled in MH programs, and secondly, the typical percentage of students enrolled in Chapter 1 gradually declines as the elementary grades progress. Twenty percent of first grade students typically are

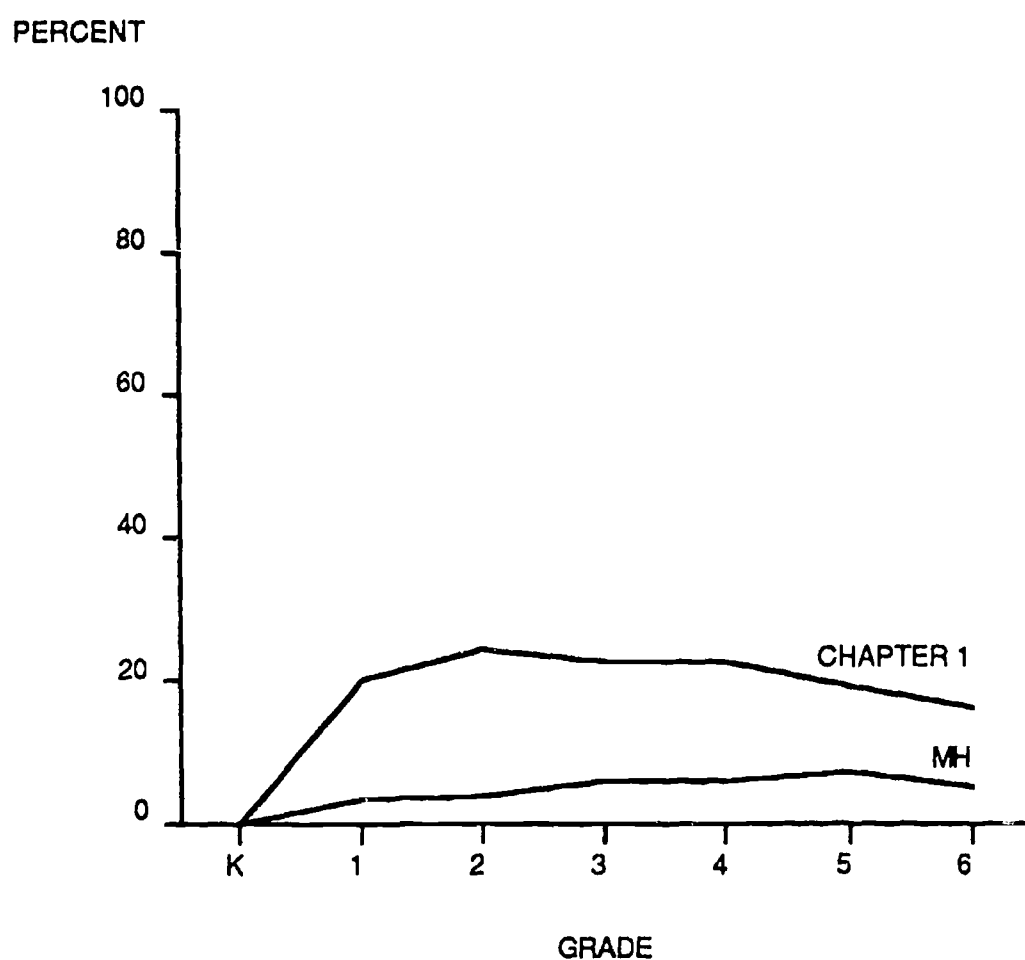
⁵Throughout this report the median is the descriptive statistic used most frequently. The median is the number that divides the cases in half; that is, there are the same number of cases with smaller values than the median as there are with larger values. The median was selected over other measures such as the mean (i.e., average) because it is less influenced by extreme values which may distort the mean. We use the term "typical" as an abbreviated way to refer to the median case.

⁶The 7 percent overall figure is lower than other enrollment estimates of special education students. Data reported to OSEP by the states for the 1986-87 school year indicate that 11 percent of all students aged 3 through 21 enrolled in school are served in special education programs. Since the focus in this report is only on mildly handicapped students, the 7 percent median enrollment in contrast to the 11 percent can be partially attributed to the fact it represents a subset of the entire handicapped child population.

The median percentage of students enrolled in special education services for MH students and in Chapter 1 programs in kindergarten is 0. This does not mean that there are no students enrolled in these services in kindergarten. Rather, this value indicates that the majority of schools do not provide these services in kindergarten. Sixty-four percent of public elementary schools which provide special education services to MH students do not offer those services in kindergarten, and 72 percent of Chapter 1 elementary schools do not offer Chapter 1 in kindergarten. (See Figure 3.)

FIGURE 4

**Median Percentage Of Public Elementary Students Receiving
Special Education Services For Mildly Handicapped Students
And Chapter 1 Services By Grade As Reported By
School Principals, 1985-86**



SOURCE: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

Figure reads: The median percentage of MH students enrolled in special education kindergarten in those schools with programs for MH in any grade is 0 percent, while the median percentage of students enrolled in Chapter 1 programs in kindergarten in those schools with Chapter 1 programs in any grade is 0 percent.

Note: The reader should not infer from this figure that there are no students enrolled in these services in kindergarten. Rather, this value indicates that the majority of school's do not provide these services in kindergarten. (See Figure 3.)

enrolled in Chapter 1 in public elementary schools, while only 16 percent of sixth grade students typically participate in the program. Because a relatively small percentage of schools offer Chapter 1 in kindergarten and a much larger percentage provide Chapter 1 in other grades, the percentage of students participating in Chapter 1 is noticeably higher in grades 1 through 5 than it is in kindergarten or grade 6.

The percentage of students enrolled in MH programs remains about the same across grades 1 through 6 despite differences in the poverty level of the school and the school's urbanicity. This pattern, again, contrasts with Chapter 1 services where the percentage of students participating is highest in urban schools, and in schools with high levels of poverty.

Chapter 1's Influence on the Percent of MH Students Receiving Special Education Services

The possibility that Chapter 1 may serve students who might in other schools qualify for MH services prompted an analysis of whether the percentage of MH students in each grade varied as a result of the presence of Chapter 1 in the schools. In fact, median MH grade level percentages did not vary across Chapter 1 and non-Chapter 1 schools. We conducted additional analyses to see if the higher level of Chapter 1 resources in poorer, urban schools would result in reducing the percentage of pupils enrolled in MH programs in those schools. However, overall MH enrollments remained stable and did not vary even when poverty and urbanicity comparisons were made for schools with and without Chapter 1 programs. These patterns were corroborated in the Resource Allocation Study performed for the National Assessment of Chapter 1, which found that the presence of resources for learning disabled students did not influence the allocation of Chapter 1 resources to schools (Goertz, 1987).

The stability of the percentage of MH students across schools suggests that districts are not using Chapter 1 programs in place of MH services in schools. Schools serve about the same percentage of MH students regardless of the availability of Chapter 1 programs, or the poverty or urbanicity of the school. However, this conclusion warrants some qualification. It is based on the assumption that students in schools with high concentrations of poverty are equally as likely to be learning disabled and suffer emotionally-based behavior problems as children who are not exposed to conditions of family poverty. Conceivably, the prevalence of these handicaps may be higher in poorer areas. If there is a higher prevalence, the uniform MH enrollments across poor schools may indicate a problem of underidentification of

MH pupils in these schools because under such a circumstance poorer schools should reflect higher MH enrollment percentages than other schools.

The research on disproportionate incidence of mild handicapping conditions in poor areas, however, is inconclusive. Some studies have found a positive correlation between race or school socioeconomic status measures and the incidence of mild handicaps such as learning disabilities (Gelb and Mizokawa, 1986; Cartledge, Stupay, and Kaczela, 1984; Dew, 1984; Argulewicz, 1983; and Finn, 1982), but other studies have uncovered no relationship (Winter, 1983; Low and Clement, 1982).⁷

Selection Procedures for MH Students

As might be expected from the protection in evaluation procedures (PEP) requirements contained in the EHA-B statute governing the identification of handicapped students, principals report that the selection of students for MH programs usually is based on a combination of measures. The PEP requirements for EHA-B include provisions that no single procedure be used as the sole determinant for placing a child in special education services. Placement decisions must be based on information derived from a variety of sources such as aptitude and achievement tests, teacher recommendations, physical condition, social or cultural background, and adaptive behavior. In contrast, principals report using fewer measures to select students for Chapter 1. The most frequently reported selection procedures for MH students are measures other than standardized tests (98 percent), followed closely by classroom teacher recommendations (88 percent), standardized test scores (84 percent), special teacher recommendations (82 percent), and parent requests (76 percent). "Measures other than standardized tests" include various diagnostic, aptitude, and intelligence assessments (Table 1). Selection practices for Chapter 1 are based more often on test scores (97 percent) and classroom teacher recommendations (86 percent), with other measures cited as a distant third (59 percent).

A noteworthy difference between methods of selection for MH services and Chapter 1 is the greater role played by parent requests in MH programs. Over three-quarters of elementary schools indicate this as a factor in MH selection whereas just over half of Chapter 1 elementary schools report parents involved in the identification

⁷Considerable research has examined racial disproportions in the area of mental retardation (see Reschly, 1987; Heller, Holtzman and Messick, eds., 1982). This research has not focused on the relationship between poverty and mental retardation, but has found blacks and Hispanics disproportionately categorized as mentally retarded.

TABLE 1
Selection Procedures for MH and Chapter 1
Programs, 1985-86

	Percent of Schools	
	Mildly Handicapped	Chapter 1
Standardized test scores	84	97
English proficiency test scores	31	22
Other measures (e.g. diagnostics, aptitude, intelligence tests)	98	59
Classroom teacher recommendation	88	86
Special teacher recommendation	82	51
Parent request	76	53
All students participate	n.a.*	1
	N=552	N=364

Source: Survey of Schools conducted for the National Assessment of Chapter 1, 1985-86.

Table reads: 84 percent of elementary school principals report using test scores to select students for MH services compared to 97 percent who use test scores to select Chapter 1 participants.

* The School Survey did not contain this option for teachers and principals responding to questions about services for mildly handicapped students.

procedures for Chapter 1. In addition, parents are uniformly involved in the MH identification process across schools with different levels of poverty and urban/rural settings. Yet the involvement of parents in Chapter 1 selection decreases with higher levels of school poverty, and is far less apparent in urban settings. In fact, Chapter 1 selection procedures become less inclusive of additional measures as school poverty increases, and more exclusively reliant on standardized test scores. Consequently, the selection procedures in urban schools are less likely to incorporate teacher recommendations and parent requests than is true in non-urban schools.

The multi-faceted assessment process used to identify MH students--over three-quarters or more of school principals cited five different measures--constitutes a major difference between the two programs' approaches to evaluating pupils. School administrators emphasize the importance of the multiple measures used in special education for detecting processing difficulties as well as skill deficits in students eligible for MH services (Goertz, 1987). Furthermore, other research has indicated that the identification procedures for special education services rely heavily on teachers' referrals of students for assessment. Standardized achievement tests are but one component of a battery of assessment measures that are subsequently used to diagnose the nature of the child's difficulties. The process has been summarized as one where "(T)esting does not drive decisions but is driven by decisions" (White and Calhoun, 1987).

Conversely, Chapter 1 selection decisions are often based initially on the outcomes of standardized tests. Only half of Chapter 1 districts rely on teachers to nominate students for testing to determine their eligibility; in the other half, tests are routinely administered to students to select participants for Chapter 1. Even when teachers nominate students for testing, students may be routinely tested with teacher nominations applying only to mid-year transfer students or to students whose performance raises serious concern during the course of the school year. Teacher judgments in Chapter 1 selection decisions also occur in the aftermath of tests, either arranging for services for mid-year transfer students or reconsidering the results of test scores for particular students with respect to their participation in Chapter 1 (Birman et al., 1987). In sum, test results and teacher judgments play a different role in the selection of students for Chapter 1 services than they do in special education.

One might expect the differences that characterize the selection of Chapter 1 and MH students to result in groups of students who differ in some identifiable respects. Although some researchers report an inability to distinguish between students identified

as learning disabled and others characterized as low achievers (Shephard et al., 1983; Ysseldyke et al., 1982), MH teachers responding to the School Survey for the National Assessment of Chapter 1 consistently reported a greater percentage of their students scoring below the 50th and 25th percentile in reading and language arts than did Chapter 1 teachers. The reliability of these reports is hindered, however, by the fact that they represent teachers' perceptions of student performance, not actual scores of students. Moreover, the differences between the two groups, though consistently in the same direction, did not prove statistically significant. The surveys and studies commissioned by the National Assessment of Chapter 1 do not contain any additional measures of MH and Chapter 1 student differences which would allow further comparisons between the two groups.

Dual Services for MH and Chapter 1 Pupils

Federal Chapter 1 requirements state that handicapped students cannot be excluded from programs solely because of their handicap if they can benefit from those programs; but neither can districts use Chapter 1 funds to support special education services that these students are entitled to by law.⁸ These requirements place considerable pressure on districts to ensure that the Chapter 1 services received by a mildly handicapped child are not designed to fulfill the student's special education

⁸The 1986 Non-Regulatory Guidance gives the following advice for when Chapter 1 programs can serve handicapped pupils:

- o The district "designs its Chapter 1 project to address special needs resulting from educational deprivation, not needs relating to a child's handicapping condition;"
- o The district "sets overall project objectives that do not distinguish between handicapped and nonhandicapped participants;"
- o The district "(A) through the use of uniform criteria, selects children for participation on the basis of educational deprivation, not on the basis of handicap; and (B) selects as participating handicapped children only those who can reasonably be expected to make substantial progress toward accomplishing project objectives without the LEA substantially modifying the educational level of the subject matter; and"
- o The district "provides Chapter 1 services at intensities taking into account the needs and abilities of individual participants, but without distinguishing generally between handicapped and nonhandicapped participants with respect to the instruction provided."

needs. Thus, questions arise as to whether districts and schools allow MH students to participate in Chapter 1 programs at the same time (dual service). From another perspective, linking or sequencing the two programs may provide school staff with a better approach to helping students who appear eligible for both programs in a school. It may be effective for school personnel to use Chapter 1 services as a bridge for potential MH students who exhibit difficulties in learning but whose diagnosis as MH is unclear (often called pre-referral services), or to help students who have been receiving MH services but no longer require them.

The District Survey undertaken for the National Assessment of Chapter 1 asked district officials to indicate their rules regarding Chapter 1 services to students with mental and physical handicaps.⁹ About 56 percent of Chapter 1 districts report policies that allow students with mental handicaps the possibility of selection into Chapter 1 programs. A third of districts, as a matter of policy, report excluding students with mental handicaps from participation in Chapter 1 programs. However, only 7 percent of Chapter 1 districts use exclusion policies for students with physical handicaps. These numbers suggest that in a majority of districts local school staff have the flexibility to select students with mild handicaps into both programs, subject to assessments of whether the child can benefit, availability of space, and the students' ability to meet the criteria used for Chapter 1 eligibility. They also indicate that a noteworthy percentage of districts may illegally exclude students with mental handicaps from Chapter 1 eligibility.

Forty-two percent of elementary school principals in schools with both MH and Chapter 1 services report that some pupils receive dual services. MH and Chapter 1 teachers' reports about whether any students in their classes participate in both programs offer an additional perspective on student receipt of dual services. Six percent of MH teachers and 36 percent of Chapter 1 teachers surveyed report that some of their students receive both Chapter 1 and special education. Because Chapter 1 teachers teach about twice as many students as MH teachers, the likelihood is higher that more Chapter 1 teachers would report dually-served students in their classes. Nevertheless, none of these reports provide a basis for estimating the number

⁹The change in terminology referring to handicapped students in this paragraph results from terminology differences between the District Survey and the School Survey. The reader should note that the term, students with mental handicaps, encompasses a wider population than the mildly handicapped students referred to in the School Survey.

of students actually receiving dual services. An indepth set of case studies completed for the National Assessment of Chapter 1 indicated that local staff are generally reluctant to recommend multiple programs for eligible students and, as a result, minimize instances of dual services for students (Knapp et al., 1986).

Information regarding dual service patterns at the district level is limited, but we were able to investigate the student information systems of two districts that participated in the Chapter 1 Targeting Study (Wood et al., 1986). Districtwide percentages of dual participation in MH and Chapter 1 were low in both districts, hovering close to 1 percent of all students in the district. Differences emerged between the two districts, however, in the proportions of schools with dually served students. In one district over half the schools had an average of four students who participated in both programs while in the other district one-fifth of the schools had an average of six students receiving both services. In both districts, the dually-served students on average had lower achievement test scores than either group receiving services from only one program. These findings, however, relate to only two districts, and as such are extremely limited in their generalizability.

When students do participate in both MH and Chapter 1 programs, the coordination of their instruction becomes a major question. In general, research indicates that participation in multiple programs can produce difficulties (Rowan et al., 1986). Data from the surveys conducted for the National Assessment of Chapter 1 reveal that coordination efforts between MH teachers and Chapter 1 teachers who share students focus on discussing the student's needs verbally rather than jointly developing written lesson plans. Over two-thirds of MH teachers and three-quarters of Chapter 1 teachers report meeting with each other to discuss the instructional needs of their students, yet just over a third of either type of teacher reports developing written lesson plans together. Less than a third of schools with dually-served students use the same curriculum in both programs serving these students, suggesting that the pupils are receiving different content from each program.

A comparison between MH teachers' coordination efforts with regular classroom teachers and those with Chapter 1 teachers reveals that MH teachers report more contact with the regular teacher than with the Chapter 1 teacher. Half of MH teachers report working together with the regular teacher to develop written lesson plans, and over 90 percent report joint meetings with the regular teacher to discuss students' instructional needs. Chapter 1 teachers report virtually identical levels of contact with regular teachers, again much higher than their reported levels of contact

with teachers of MH students. Sixty percent of Chapter 1 teachers write joint lesson plans with the regular teacher, and 92 percent discuss their students' instructional needs with the regular teacher. These findings suggest that for dually served students, the regular classroom teacher, as opposed to the special teacher, may be the central point of coordination for the students' overall instructional program.

Sequential Program Participation

Sequential participation between MH programs and Chapter 1 is more common in elementary schools than students receiving dual services simultaneously. Half of Chapter 1 teachers in schools with both programs reported that some students in their schools receive Chapter 1 prior to moving into special education. Over two-thirds of Chapter 1 teachers in schools with both programs indicated that some MH students in their schools move out of MH services into Chapter 1 programs. Thus, well over half of Chapter 1 teachers report movement of students across the two programs, suggesting that Chapter 1 programs frequently serve as a bridge between services for students whose diagnosis as mildly handicapped is unclear or students who may require different services prior to their sole reliance on the regular program of instruction.

CHAPTER 3

INSTRUCTIONAL SERVICES FOR MILDLY HANDICAPPED STUDENTS

The existence of separate programs and services for mildly handicapped pupils and educationally disadvantaged pupils is in large part based on the premise that children with handicapping conditions require instructional services that differ from those required by students whose learning difficulties stem from poverty. Districts, however, are the ultimate implementers of services to meet the needs of both groups of students. To what extent do special education services for mildly handicapped students differ from Chapter 1 compensatory services in the schools?

Instructional services can be compared across a number of features. The School Survey conducted for the National Assessment of Chapter 1 contains information on several dimensions considered relevant to effective programs for pupils with special instructional needs. These include the setting (for example, pullout or in-class services), teacher characteristics, and several features related to the intensity of instruction (minutes of instruction, size of instructional group, and pupil/teacher ratios). Unfortunately comparative data are not available on other features of instructional services that might prove informative--features such as the use of specific teaching approaches, curricular content, and the amount of regular instruction that MH students miss from the regular classroom.

Examination of the various dimensions on which data are available reveals important differences between special education services for MH students and compensatory education services for Chapter 1 pupils. Only on the most superficial terms do the services provided by each program appear similar.

Instructional Setting

MH programs frequently use designs that pull the MH student out of the regular class to receive special instruction in resource rooms, a concept similar to the pullout approach used in Chapter 1. Principals at Chapter 1 schools reported a large use of the pullout approach--84 percent have pullout models for Chapter 1 reading instruction, while only 28 percent report the use of in-class approaches. Eighty-five percent of school principals report that their schools deliver MH services through resource rooms (Table 2). However, 52 percent of school principals indicate that in-class or mainstream approaches are used in their schools to provide MH services, and well over

TABLE 2

Settings for Special Education Services for Mildly Handicapped Students

Percent of Principals Responding

	Overall	Schools With Chapter 1	Schools With No Chapter 1	School Poverty Quartile				School Urbanicity			
				Lowest 0 - 15%	2nd Lowest 15.1 - 30%	2nd Highest 30.1 - 50%	Highest 50.1% +	Urban	Suburban	Small Town	Rural
Self-contained classroom	37	38	34	26	38	35	50	51	39	37	15
Resource room	85	84	86	87	82	88	82	84	84	85	85
Inside regular classroom	52	52	54	49	63	47	53	40	54	63	47

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

N=552

Table reads: 37 percent of public elementary schools provide Special Education services in self-contained classrooms.

Note: Percentages do not sum to 100 because principals could choose more than one setting.

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

a third of principals report using self-contained classroom settings to deliver MH services. The School Survey allowed principals to choose more than one setting if it applied to their school. Moreover, principals were not required to indicate the number of students served in each setting. Consequently, we cannot estimate from available data the number of students participating in each setting. While no particular pattern characterizes the use of resource rooms and in-class approaches across different types of schools, self-contained classes are more frequently used in urban schools with high poverty levels and are used very little in rural schools. Urban schools and schools with the highest concentrations of poverty typically have a greater variety of settings available to serve pupils who are mildly handicapped.

The use of in-class models for MH students in half the elementary schools is noteworthy in light of recent debates about the desirability of minimizing pullout approaches in special education, but these responses must be interpreted with caution. These estimates of use of in-class models cannot generate estimates of the number of students affected by such approaches.

Instructional Time and Content

Teachers of MH students typically have half as many students as Chapter 1 teachers (Table 3). The median teaching load for teachers of MH students in reading, for example, is 11 students, while for Chapter 1 students it is 27 students. When students actually receive instruction within their classes, teachers of MH students report a typical instructional group size of three for reading and math compared to five for Chapter 1.

Time devoted to instruction, as reported by teachers, differs between MH programs and Chapter 1. MH pupils typically receive about 45 minutes of reading and math instruction in their special education programs each day as compared with 35 and 30 minutes respectively that Chapter 1 teachers report their students receive in each compensatory education subject (Table 3).

Teachers also indicate a somewhat different orientation to the content of instruction (Table 4). While the majority of teachers in both groups of teachers report that they view their teaching as reinforcing material taught in the regular classroom, a smaller percentage of MH teachers declare this to be the case. Twenty percent of these teachers as compared to 6 percent of Chapter 1 teachers report that their classes introduce new material to students other than that covered in the regular class.

TABLE 3

Characteristics of MH and Chapter 1 Instructional Services
as Reported by Teachers, 1985-86

	Mildly Handicapped		Chapter 1	
	Reading	Math	Reading	Math
Median number of students per teacher	11	10	27	19
Median size of instructional group	3	3	5	5
Median days per week	5	5	5	5
Median minutes per day	45	45	35	30

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

N=539 (MH), 676 (Chapter 1)

Table reads: The median number of MH reading students per teacher is 11, MH math students is 10; the median number of Chapter 1 reading students per teacher is 27, Chapter 1 math students is 19.

TABLE 4

**MH and Chapter 1 Teachers Reports of the Purpose
of MH and Chapter 1 Instruction, 1985-86**

	Percent of Teachers	
	Mildly Handicapped	Chapter 1
Introduce new material	20	6
Reinforce material taught in the regular classroom	68	91
Both	9	9
	N=539	N=567

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Table reads: 20 percent of MH teachers report that the main purpose of MH instruction is to introduce new material not taught in the regular classroom.

Note: Percentages for MH teachers do not sum to 100 because of those who did not respond to the question.

While the National Assessment studies do not permit a precise assessment of exactly how curricular content differs between MH and Chapter 1 classes, they suggest that those who teach such classes view their purposes differently.

MH programs and Chapter 1 programs do resemble each other in the frequency with which teachers in each program are assisted by an aide, however. Slightly over half of each group of teachers report teaching with the assistance of an aide (Table 5). In this respect they differ from regular classroom teachers; just over a quarter of regular teachers report teaching with the assistance of an aide. The use of aides for MH programs, however, occurs across all levels of school poverty and urbanicity; aides in Chapter 1 programs are much more likely to be present in urban, high poverty schools.

Characteristics of Teachers

Teachers of MH students differ from Chapter 1 teachers in their educational preparation (Table 6). However, the level of education for the two types of teachers is roughly equivalent although more teachers of MH students have Master's degrees and graduate study beyond a Master's degree. More pronounced differences can be seen in years of experience, and specialist credentials. Chapter 1 teachers tend to have more years of experience as measured in total years of teaching experience. However, more teachers of MH students have specialist credentials than Chapter 1 teachers, particularly in special education, while Chapter 1 teachers have more reading credentials. Eighty-five percent of the teachers of MH students have specialist credentials, while only 42 percent of the Chapter 1 teachers have any specialist credentials.

The Influence of Chapter 1, School Poverty, and School Urbanicity on Instructional Characteristics of MH Services

The instructional dimensions of MH programs described in the preceding paragraphs are remarkably stable in spite of differences in school poverty or the presence of Chapter 1 programs in the school (Tables 7 and 8). Median instructional group sizes vary by only one student across poverty quartiles; the number of students taught by MH teachers and the minutes per day of instruction follow similar patterns. As might be expected, Chapter 1 instruction is more susceptible to poverty variations, probably as a result of higher levels of underachievement in poor schools. Specifically, the number of pupils taught by Chapter 1 teachers increases as the poverty level of

TABLE 5

Use of Aides by Teachers of MH Students, Chapter 1 Teachers
and Regular Classroom Teachers

	Overall	Schools With Chapter 1	Schools With No Chapter 1	School Poverty Quartile				School Urbanicity			
				Lowest 0 - 15%	2nd Lowest 15.1 - 30%	2nd Highest 30.1 - 50%	Highest 50.1% +	Urban	Suburban	Small Town	Rural
MH	54	53	58	55	57	48	55	50	57	62	41
Chapter 1	52			50	54	43	64	70	37	55	36
Regular Classroom	27	26	29	25	20	22	41	39	22	26	25

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

N=539 (MH), 507 (Chapter 1), 599 (regular)

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

Table reads: 54 percent of the teachers of mildly handicapped students report having the assistance of aides in the classroom.

TABLE 6

Teachers' Educational Attainment and Years of
Experience in Teaching, 1985-86

	Mildly Handicapped	Chapter 1	Regular
Degree			
Bachelor's	17	21	19
Bachelor's +	24	28	35
Master's	41	36	31
Beyond Master's	18	15	14
Years of Experience			
1 - 5	21	15	12
6 - 10	32	22	19
11 - 20	37	43	49
Beyond 20	10	20	20
Specialist Credentials*			
Reading	5	29	8
Special Education	58	4	5
Other	40	13	20
None	15	58	70
	N=492	N=567	N=599

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Table reads: 17 percent of teachers of mildly handicapped students have only a Bachelor's degree, 21 percent of Chapter 1 teachers have only a Bachelor's degree, and 20 percent of regular classroom teachers have only a Bachelor's degree.

* Percents do not sum to 100 because a teacher could hold more than one specialist credential.

TABLE 7

Instructional Characteristics of MH Reading Programs by Chapter 1 Status,
Poverty and Urbanicity of the School, 1985-86

	Schools With Chapter 1	Schools With No Chapter 1	School Poverty Quartile				School Urbanicity			
			Lowest 0 - 15%	2nd Lowest 15.1 - 30%	2nd Highest 30.1 - 50%	Highest 50.1% +	Urban	Suburban	Small Town	Rural
Median number of students	12	11	12	11	12	11	12	11	13	11
Median size of instructional group	3	3	2	3	3	4	3	3	3	3
Median days per week	5	5	5	5	5	5	5	5	5	5
Median minutes per day	45	45	45	45	45	47	50	45	45	30

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

N=539

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

Table reads: The median number of MH reading students in schools with Chapter 1 is 12, and in schools with no Chapter 1 program is 11.

TABLE 8

Instructional Characteristics of Chapter 1 Reading Programs by Poverty,
and Urbanicity of the School, 1985-86

	School Poverty Quartile				School Urbanicity			
	Lowest 0 - 15%	2nd Lowest 15.1 - 30%	2nd Highest 30.1 - 50%	Highest 50.1% +	Urban	Suburban	Small Town	Rural
Median number of students	21	28	31	35	32	21	24	33
Median size of instructional group	4	5	4	5	5	4	5	4
Median days per week	5	5	5	5	5	5	5	5
Median minutes per days	32	30	30	45	45	30	30	30

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

N=676

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

Table reads: The median number of Chapter 1 reading students in schools in the lowest poverty quartile is 21.

the school increases. In addition, the minutes per day of Chapter 1 reading and math lessons is noticeably higher in the highest poverty schools.

The one exception to the constancy of MH services across different school situations occurs in rural schools. Although the number of rural schools sampled is much smaller than in other categories making estimates less precise, these schools differ from the national norm on several dimensions (Table 9). Compared with urban and suburban schools, rural elementary schools providing MH programs rely more on resource rooms and less on self-contained classes, they are more likely to employ MH teachers who have recently completed their degrees and have less years of experience, and they provide fewer minutes of MH instruction in reading and math. It is unlikely that there is one explanation for the differences in MH services exhibited by rural schools; rather, it appears that combined forces influence the structure of MH services in these locations. These may include difficulty in recruiting qualified teachers, smaller enrollments, and perceptions of best practice in helping students with mild handicaps.

TABLE 9
Characteristics of MH Programs in Rural Schools and
Nationally, 1985-86

	Rural Median	National Median
Setting		
Resource Room	85	85
In-class	47	52
Self-contained class	15	37
Minutes of Instruction		
Reading	30	45
Math	30	45
MH Teachers' Years of Experience		
1 - 5	42	21
6 - 10	24	32
11 - 20	28	37
Beyond 20	6	10
MH Teachers' Educational Attainment		
Bachelor's	25	17
Bachelor's +	16	24
Master's	42	41
Beyond Master's	17	18
MH Teachers' Specialist Credentials		
Special Education	48	58
Reading	1	5
Other	38	40
None	28	15
	N=48	N=539

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Table reads: 85 percent of rural schools use resource rooms for their MH student instruction, 52 percent use in-class instruction, and 15 percent use self-contained classrooms; the national medians are 85 percent use resource rooms, 47 percent use in-class instruction, and 37 percent use self-contained classrooms.

CHAPTER 4

CONCLUSIONS

The combined presence of special education programs for mildly handicapped pupils and Chapter 1 programs for educationally disadvantaged students in the large majority of school districts and elementary schools reinforces the importance of understanding the relationship between both programs. This report contains findings from surveys and case studies commissioned by the National Assessment of Chapter 1 pertaining to contrasts between the programs and their interaction at the local level. Although the data available do not permit a complete examination of questions regarding the programs and their mutual influence, overall they demonstrate that the services provided by each program differ considerably and then suggest that the programs do not serve as substitutes for each other.

Contrasts in Services to Mildly Handicapped Students and Chapter 1 Students

On the surface, MH and Chapter 1 programs have a few common features. They are both broadly spread across districts and elementary schools in the nation. Moreover, both programs serve similar grades within the schools. As a result, the likelihood is high in elementary schools that both Chapter 1 services and services for mildly handicapped pupils will co-exist in most elementary grades. The likelihood of schools offering special education services for MH students as well as Chapter 1 is particularly high in schools with larger concentrations of poor students since Chapter 1 funds reach a greater proportion of these schools.

Only at a very broad level, however, do Chapter 1 programs and those for MH pupils exhibit instructional similarities. The predominant model used to provide both MH and Chapter 1 services is one of pulling the student out of the regular class for a portion of time to provide more intensive, special help, particularly in reading and math. Schools less frequently use other approaches for providing assistance under these two programs. These entail providing the special help within the regular class or in a special class that replaces the regular class. Both programs are usually taught by specially-trained teachers about half of whom have the assistance of an aide.

On the factors most closely related to student instruction, however, MH and Chapter 1 programs differ noticeably. MH programs serve a lower percentage of students within each school and grade than do Chapter 1 programs. Moreover, unlike

Chapter 1 enrollments within the grades, from second grade on, MH enrollments stay close to 7 percent. Chapter 1 enrollments constitute a declining percentage (20 to 16 percent) of total enrollment across grades 1 through 6.

A sharp difference is evident in the procedures used to assess students as eligible for MH and Chapter 1 programs. Assessment procedures for MH programs encompass a greater variety of measures than is the case in Chapter 1. MH assessments include measures other than standardized achievement tests and rely more on teacher judgement and parent recommendations. In contrast, Chapter 1 selections often are dominated by achievement test results with teacher judgments serving to correct and adjust decisions that ensue from these test results.

The instructional services that are provided to MH students differ from Chapter 1 services in measures of the overall number of students assigned to teachers, instructional group size, and minutes of instruction per day. In all these categories, services for MH students appear more intense, assigning fewer pupils to teachers and using smaller instructional groups for longer periods of time. While aides assist each group of teachers with about the same frequency, teachers of MH students as a group are less experienced than Chapter 1 teachers but more likely to have specialist credentials. MH teachers more frequently characterize the purpose of their instruction as introducing new material to students; Chapter 1 teachers typically see their purpose as reinforcing material taught in the regular classroom.

The characteristics of programs and services for MH students examined in this report were rarely influenced by the poverty level of the school, a pattern that differs for Chapter 1 programs. Urbanicity exerts greater influence on services for MH pupils, but not consistently so. The principal differences observed for rural schools is their tendency to use resource room settings, the inexperience of their teachers of MH pupils, and the shorter amount of reading and math instructional time they provide through the MH program.

Interactions Between Special Education Services for MH Students and Chapter 1 Programs

A long-term issue for Federal policymakers is the extent to which the availability of Chapter 1 in schools influences how districts distribute resources to meet the needs of MH students. The statute and regulations governing Chapter 1 require that school districts use Chapter 1 funds for supplemental instruction for educationally disadvantaged pupils and not for services that federal and state law, or court decrees,

require them to provide to students. The intent is for eligible Chapter 1 students to obtain the services they are entitled to by law and, aside from that, whatever Chapter 1 assistance from which they may benefit.

The school level data collected by the National Assessment of Chapter 1 allowed an examination of whether districts located school level programs for mildly handicapped pupils in schools without Chapter 1 or whether schools with Chapter 1 had a smaller percentage of pupils served in MH programs than did non-Chapter 1 schools. The results indicate that Chapter 1 programs do not alter the distribution of resources for special education services for MH youngsters in elementary schools. Programs for MH students are distributed across schools without regard to school poverty, urbanicity, or the availability of Chapter 1. Moreover, elementary school principals consistently report about the same median percentage of MH pupils receiving special education services regardless of these factors.

Information from the National Assessment of Chapter 1 also sheds light on districts' and schools' responses to students who are potentially eligible for services from both programs. Although some districts (32 percent) report rules that automatically exclude pupils diagnosed as having MH conditions, most districts allow local staff to determine whether they can participate in both programs. Slightly, less than half of elementary school principals in schools with both programs report that at least some students do receive dual services. Related information from case studies conducted for the National Assessment shows that local school staff attempt to minimize instances of dual service both on pedagogical grounds and on reluctance to violate the Chapter 1 supplanting rules.

The sequential provision of Chapter 1 and special education services for MH pupils constitutes another form of interaction between the two sets of services. Using Chapter 1 as a pre-referral service for students who show some of the characteristics of MH conditions but whose diagnosis is unclear, and as a post-special education support for students who are ready to exit the more intensive services provided to MH children, can be an effective bridge for meeting the instructional needs of some pupils. Well over half of elementary schools link the two programs into sequential services for some students.

Summary

We have noted frequently that the findings presented in this report address only a portion of the questions surrounding how Chapter 1 programs and services for mildly

handicapped pupils co-exist and interact at the school level. Nevertheless, the information presented underscores school officials' response to Congressional intent to structure different selection patterns and services for the populations targeted. Most districts appear to have responded to Federal Chapter 1 requirements to eliminate influence from both programs on the distribution of special education and compensatory education resources, but have allowed local staff to judge whether and how to link services for individual students within the schools. Moreover, districts provide different instructional services for students served in each program, and identify students using different procedures.

Sequential programming, where Chapter 1 services function as an initial intervention for students with uncertain problems, and as an instructional bridge for students no longer needing MH programs, is a more popular practice across schools than is dual service. Since MH programs typically offer more intense services, Chapter 1 programs appear to function as assistance for low-achieving students who are likely to benefit from intermediate levels of special assistance.

REFERENCES

- Argulewicz, E.N.
1983 "Effects of Ethnic Membership, Socioeconomic Status, and Home Language on LD, EMR, and EH Placements." *Learning Disability Quarterly* 6: 195-200.
- Birman, B.
1979 Case Studies of Overlap Between Title 1 and PL 94-142 Services for Handicapped Students. Menlo Park, CA: SRI International.
- Birman, B., M. Orland, R.K. Jung, R.J. Anson, G.N. Garcia, et al.
1987 *The Current Operation of the Chapter 1 Program*. Washington, D.C.: U.S. Department of Education.
- Cartledge, G., D. Stupay, and C. Kaczala
1984 Formal Language Assessment of Handicapped and Nonhandicapped Black Children. Presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Dew, N.
1984 "The Exceptional Bilingual Child: Demography," in P.C. Chinn (ed.) *Education of Culturally and Linguistically Different Exceptional Children*. Reston, VA: ERIC Clearinghouse on Handicapped and Gifted Children/Council for Exceptional Children.
- Finn, J.D.
1982 "Patterns in Special Education Placement as Revealed by the OCR Surveys," in K.A. Heller, W.H. Holtzman, and S. Messick (eds.) *Placing Children in Special Education: A Strategy for Equity*. Washington, D.C.: National Academy Press.
- Gartner, A., and D.K. Lipsky
1987 "Beyond Special Education: Toward a Quality System for All Students." *Harvard Education Review* 57: 367-395.
- Gelb, S.A. and D.T. Mizokawa
1986 "Special Education and Social Structure: The Commonality of 'Exceptionality'." *American Educational Research Journal* 23: 543-557.
- Goertz, M.E.
1987 School Districts' Allocation of Chapter 1 Resources. Princeton, NJ: Educational Testing Service.
- Heller, K.A., W.H. Holtzman, and S. Messick (eds.)
1982 *Placing Children in Special Education: A Strategy for Equity*. Washington, D.C.: National Academy Press.
- Kimbrough, J. and P.T. Hill
1982 *The Effects of Multiple Categorical Programs on Schools and Students*. Santa Monica, CA: The Rand Corporation.

- Knapp, M.S., B.J. Turnbull, C.H. Blakely, E.D. Jay, E.L. Marks and P.M. Shields
1986 Local Program Design and Decisionmaking Under Chapter 1 of the Education Consolidation and Improvement Act. Menlo Park, CA: SRI International.
- Low, B.P. and P.W. Clement
1982 "Relationships of Race and Socioeconomic Status to Classroom Behavior, Academic Achievement, and Referral for Special Education." *Journal of School Psychology* 20: 103-112.
- Office of Special Education Programs
1988 Tenth Annual Report to Congress on the Implementation of the Education of the Handicapped Act. Washington, D.C.: U.S. Department of Education.
- Reschly, D.J.
1987 "Minority MMR Overrepresentation and Special Education Reform." *Exceptional Children* 54: 316.
- Rowan, B., L.P. Guthrie, G.V. Lee and G.P. Guthrie
1986 The Design and Implementation of Chapter 1 Instructional Services: A Study of 24 Schools. San Francisco, CA: Far West Laboratory.
- Shepard, L.A., M.L. Smith, and C.P. Vojir
1983 "Characteristics of Pupils Identified as Learning Disabled." *American Educational Research Journal* 20: 309-331.
- Smith, M.L.
1982 How Educators Decide Who is Learning Disabled. Springfield, IL: Charles C. Thomas.
- White, R. and M.L. Calhoun
1987 "From Referral to Placement: Teachers' Perceptions of Their Responsibilities." *Exceptional Children* 53: 460-468.
- Winter, A., et al.
1983 Characteristics of Pupils Entering Learning Disabilities Self-Contained Classes, 1981-1982. Toronto, Ontario, Canada: Toronto Board of Education.
- Wood, C.T., R. Gabriel, C. Marder, N.N. Gamel and A. Davis
1986 A Study of Targeting Practices Used in the Chapter 1 Program. Mountain View, CA: SRA Technologies, Inc.
- Ysseldyke, J.E., B. Algozzine, L. Richey, and J. Graden
1982 "Declaring Students Eligible for Learning Disability Services: Why Bother With the Data?" *Learning Disability Quarterly* 5: 37-44.

APPENDIX A

**DESCRIPTION OF SCHOOL SURVEY, DISTRICT SURVEY,
AND STUDY OF TARGETING PRACTICES**

This appendix contains a general description of the design and procedures of the School Survey, the District Survey, and the Study of Targeting Practices conducted for the National Assessment of Chapter 1.

I. NATIONAL SURVEY OF ECIA CHAPTER 1 SCHOOLS: DESIGN AND PROCEDURES

The School Survey was based on a sample of 1,200 elementary and secondary schools selected from a random, stratified sample of primary sampling units (PSUs) composed of school districts. Approximately 4,000 respondents were selected from these schools to obtain profiles which were nationally representative of Chapter 1 elementary and secondary schools as well as of all elementary schools. In addition, data from these respondents were used to estimate variations among Chapter 1 schools and all elementary schools as well as between Chapter 1 and non-Chapter 1 schools along selected dimensions of interest, such as school poverty rates.

Sample Design and Weighting Coefficients

Selection of School Districts

The sampling frame employed in the selection of sample school districts was the 1985 Quality Education Data (QED) school file aggregated to the district level. This file contained a comprehensive and current listing of school districts and characteristics of interest.

To achieve adequate representation of different types of school districts, three stratification variables were employed for organizing the district listings prior to selection: region, urbanicity, and Orshansky poverty index. Region was assigned to a school district in accordance with the four Census regions: Northeast, North Central, South, and West. Urbanicity, as contained on the QED tape, codes a school district as being located in an urban area, a suburban area, or rural area. Three groups were identified by the third stratification variable, the Orshansky poverty index, available from the Census by school district. The three levels were: (1) districts with 12 percent or fewer students below the poverty level, (2) districts with more than 12 percent but less than 25 percent of students below the poverty level, and (3) districts with 25 percent or more students below the poverty level. Thirty-six strata were created by the use of the three stratifying variables.

Primary sampling units (PSUs) were formed from school districts within these strata. A school district with 15 or more schools constituted a PSU. Within each

stratum, districts with fewer than 15 schools were combined to form PSUs. School districts within a State were joined until the combined number of schools was at least 15. These PSUs, therefore, had a minimum number of 15 schools though the number of school districts they represented varied somewhat.

The sample of 71 PSUs was allocated to the strata in proportion to the numbers of teachers each stratum contained. The selection of PSUs within strata was accomplished by systematic random sampling with probabilities proportionate to size (PPS), with size defined as the total number of teachers in its school district(s). The sample of 71 PSUs drawn in this manner yielded 224 school districts.

Second Stage Sampling: Schools

A total of 1,200 schools was selected from the first-stage sample of school districts. Of the 1,200 schools, 700 were from the public elementary stratum, 100 from the private elementary stratum, and 300 from the public secondary stratum (including middle schools). In addition, 50 Chapter 1 public schools serving limited English proficient students and 50 Chapter 1 public schools serving very high concentrations of low-income students were distributed across elementary and secondary levels. The school districts were ordered by characteristics of importance to ensure adequate representation of these types of districts.

Sampling Frame for Schools. Once a district had been selected, a copy of its most recent Chapter 1 application was obtained from the appropriate State Chapter 1 Office. This provided the basic stratifying information for the school sampling frame, as described in the next section. Stratifying variables included grade span, sources of funding, number of students with limited English proficiency (LEP), and poverty level of school. These data were obtained for all public schools in the district, and for private schools with students who were receiving Chapter 1 services.

Stratification Scheme for Schools. The school sampling frame was stratified by the following characteristics: public/private control; Chapter 1/non-Chapter 1; elementary/middle/secondary; within the public stratum by presence/absence of LEP population and by presence/absence of high degree of poverty; and within the non-Chapter 1 stratum by student population similarity/nonsimilarity to Chapter 1 poverty characteristics.

Allocation of Schools to Strata. The sample of 1,200 schools was allocated to the strata as described below. Because one of the sampled private schools was no longer in operation, the final sample contained 99 rather than 100 private schools. The final

sample, then contained 1,199 schools across 165 school districts. It was not a condition that schools be selected from each of the 224 school districts in the sample.

Eleven hundred public schools were selected: 600 Chapter 1 and 500 non-Chapter 1 schools. Of the 600 public Chapter 1 schools, 50 were selected as schools with particularly high concentrations (>85 percent) of low-income children, and 50 were selected as LEP population schools. The final distribution of Chapter 1 public schools was as follows: 385 Chapter 1 elementary, 100 Chapter 1 middle, and 115 Chapter 1 secondary schools.

The sample of 500 public non-Chapter 1 schools contained 300 schools with poverty populations similar to Chapter 1 schools (200 elementary and 100 middle/secondary schools) and 200 (elementary) schools with nonsimilar populations. Although the non-Chapter 1 sample was not drawn with regard to LEP population, the non-Chapter 1 portion of the sample contained 45 elementary schools with 200 or more LEP students in each.

The 99 sampled private elementary schools were selected from district lists of private schools which, as of the spring of 1985, were projected to contain students who would be receiving Chapter 1 services during the 1985-86 school year. Since a number of changes were made in the way in which Chapter 1 services were provided to non-public school students during the course of this school year, a number of the sample private schools no longer had students receiving Chapter 1 services when the survey took place. For these schools, responses to the principal questionnaire were obtained, but attempts to interview Chapter 1 or regular classroom teachers were not made.

Third Stage Sampling: Respondents

The final stage in selecting the sample for this study involved the stratified random sampling of staff members from within the sampled schools. The principal of each school was selected as a respondent, along with a variable number of teachers. The exact method and sample size for teachers within a school varied according to characteristics of the school.

Sampling Frame for Respondents. Teaching staff lists generated by the schools' principals were used for the random selection of respondents from sampled schools. Teachers were categorized by respondent type as detailed below. Because the sampling design required that a teacher be listed in only one category, an order of priority was

employed, and each teacher was listed in the first category in which she/he qualified. This priority ordering of teachers was as follows:

- o Chapter 1;
- o State compensatory education;
- o Other compensatory or remedial education
- o Special services to LEP students
- o Services to mildly handicapped students; and
- o Regular classroom (a teacher having at least one student receiving services from a teacher in one of the above categories).

Selection of Respondents. Random sampling of respondents from teacher lists was done by the principal of each school and a telephone interviewer. Once the principal had listed the school's teachers according to the above categories, the telephone interviewer provided random numbers for the selection of up to two Chapter 1 teachers (or one Chapter 1 aide if there were no qualifying Chapter 1 teachers) and the selection of one teacher in each of the other existing categories in the given school.

In some school districts, the Chapter 1 district office preferred to supply the names of Chapter 1 teachers providing services in private schools, rather than have this information obtained from the private schools directly. In those cases, Chapter 1 teacher lists were compiled for each sampled private school in the district, and selection of up to two Chapter 1 teachers for each school was done randomly.

Instrument Design and Pretest

Data Collection Modes

The first step in eliciting school cooperation was sending a letter to each school that laid out the plan for sampling and subsequent interviewing. Because the sample required schools to be aware of special teacher definitions, as well as the hierarchical sampling scheme, detailed instructions were sent with the initial mailing. In the interest of time, the strategy was for principals (or the coordinators they designated) to assemble lists of teachers in appropriate categories, and for telephone interviewers to sample teachers from these listings (using random numbers) over the telephone.

Questionnaire Design

A mail questionnaire with the following content areas was developed to collect data from public school principals: a description of Chapter 1 services, a description of the school's regular instructional program, a description of other special programs in the school (compensatory education other than Chapter 1, services for limited-English-proficient (LEP) students, and services for mildly handicapped students), staff characteristics, mechanisms for coordinating services within the school, and a general description of the school. A subset of the same items constituted the private-school version of the principal questionnaire (omitting the descriptions of services other than Chapter 1 and the regular instructional program).

Five teacher questionnaires were developed for interviewing the five categories of teachers who were selected for the study within the sampled schools. Teachers were asked about: the services of the program in which they taught (Chapter 1, other compensatory or remedial education, limited-English-proficient, mildly handicapped, or the regular instructional program); their education, training, and experience; and the coordination of their services with other services in the school.

Data Collection Activities in Support of Sampling

Communication with States

The communication protocol followed for this study included notifying States regarding which districts were sampled as part of the primary sampling units, and notifying districts and States regarding sampled schools.

Notifying States of Selected Districts

At the request of the National Assessment of Chapter 1 Study staff, each State's chief school officer had already appointed a liaison to all of the Chapter 1 studies--most often the State's Chapter 1 Director. The first stage of sampling resulted in a sample of 224 districts in 30 States. Each State liaison was notified of the sampled districts within his/her individual State. At the same time, a copy of the most recent Chapter 1 funding application submitted by each identified districts was requested--for the purpose of identifying the Chapter 1 and non-Chapter 1 schools within each district.

Notifying States and Districts of Selected Schools

The second stage of sampling resulted in a sample of 1,199 schools in 30 States. Each district was notified of the sampled schools in that district; at the same time, each State liaison received a copy of the district notification letter and list of sampled schools for each district in that State.

Communication with Sampled Schools

As soon as the sample of 1,199 schools was drawn, a listing of the sampled schools was sent to the relevant district and to the state Chapter 1 liaison, followed a week later by a letter to the school. The mailout also asked the principal to name a coordinator to help in the teacher sampling and later in scheduling teacher interviews. The letter also provided instructions for compiling the lists of teachers for use in randomly selecting participating teachers (in the subsequent "sampling call").

Data Collection: Interviews of Principals and Teachers

Principals and teachers in 1,199 Chapter 1 and non-Chapter 1 schools nationwide were surveyed during the Spring of 1986. Principals responded to a mail questionnaire, while teacher interviews were conducted over the telephone. A total of 1,145 principal questionnaires were mailed, 1,046 of these to public school principals and 99 to private school principals.

Telephone interviews with the sampled teachers were conducted during April and May 1986. A staff of 30 telephone interviewers was trained to conduct these interviews.

Sample Membership and Response Rates

School Level Participation Rates

The percentage of schools that agreed to participate in the study was as follows: 92.6 percent of the private schools, 97.0 percent of the Chapter 1 public schools, and 90.3 percent of the non-Chapter 1 public schools.

The 1,110 participating schools provided the information necessary for sampling teacher respondents in carefully specified categories, and teachers were sampled in 1,044 of those schools. In the remaining 66 schools, no teachers were eligible for any of the study's teacher categories. Those schools remained in the sample and were

asked to respond to the principal questionnaire; however, no teachers were sampled or interviewed there.

Principal Questionnaire Response Rates

In all, principal questionnaires were mailed to 1,145 schools. A response rate of 87.4 percent was attained overall for the principal questionnaire with individual item response rates consistently above 90 percent. On average, response rates were slightly higher in Chapter 1 schools than in non-Chapter 1 schools.

Teacher Survey Response Rates

Teacher interviews were conducted by telephone with teachers sampled within the six teacher categories. All together, 3,134 teachers were sampled, with an average of three teachers sampled per school. More than 97 percent of the 3,134 sampled teachers responded to the telephone interview with individual item response rates consistently over 95 percent.

Population Estimation Procedures

Estimates of several types, including estimates of totals, percentages, means and medians were made for the National Survey of ECIA Chapter 1 Schools. Estimates of totals were derived from weighted sums of the values reported by responding schools or teachers. Percentages and means were then estimated as the ratios of two estimates of totals. The weights used depended on the probabilities of selection of the schools or teachers and on the rates of response in the strata of the samples.

II. NATIONAL SURVEY OF SCHOOL DISTRICTS RECEIVING ECIA CHAPTER 1: DESIGN AND PROCEDURES

The District Survey was conducted during the Spring of 1986, based on a nationally representative sample of 2,200 local school districts (for the mail survey) and a subsample of 267 of those districts (for the telephone survey). Of the 2,200 districts sampled, 2,161 were currently receiving Chapter 1 funds and were thus eligible to complete the questionnaire. Surveys were completed by local Chapter 1 coordinators or officials in the district who were considered most knowledgeable about the program. The survey results provide nationally representative estimates of district Chapter 1 policies, practices and attitudes as well as of variations along selected dimensions of interest such as district poverty rates.

Sample Design and Weighting Coefficients

Selection of School Districts

The sample of 2,200 public school districts was drawn from a population file created from the 1985 updated version of the Quality Education Data (QED), school district file.

In determining the sample design for the Chapter 1 District Survey, a number of factors were taken into consideration. These were:

- o The desire to obtain estimates of reasonable precision for districts falling in different size classifications, as well as for estimates at the national level.
- o The desire to incorporate the Orshansky poverty measure criterion into the stratification scheme, in an effort to help secure an adequate representation of those districts at the higher end of the poverty scale.
- o The desire to send out approximately 2,000 questionnaires nationwide, understanding that roughly 12 percent of all districts on the sampling frame will be non-Chapter 1 districts.

Based on these considerations, the sampling frame was partitioned into 24 strata, 8 enrollment size classes and 3 classes based on the Orshansky measures of poverty.

The classes were defined as follows:

<u>Enrollment Size Class</u>	<u>Orshansky Poverty Measure Class</u>
25,000 and over	25.0 percent and over
10,000 - 24,999	12 - 24.9 percent
5,000 - 9,999	0 - 11.9 percent
2,500 - 4,999	
1,000 - 2,499	
600 - 999	
300 - 999	
1 - 299	

The enrollment and poverty classes were identical to those employed in a 1981 survey of local program administrators (Advanced Technology, 1983). This was done to facilitate within-class longitudinal comparisons for selected items common to both surveys.

Two thousand two hundred districts were selected from this sample frame. Because a sufficient number of districts from the smallest enrollment classes were desired, the allocation for the six smallest enrollment size classes was assigned proportionate to the square root of the average enrollment size for a district within an

enrollment class (rather than proportionate to the average enrollment size itself). Districts from the two largest enrollment size classes were taken with certainty.

The allocation scheme appears below:

<u>Enrollment Size Class</u>	<u>Population Size</u>	<u>Number to Districts to be Selected</u>
25,000 and over	167	167
10,000 - 24,999	452	452
5,000 - 9,999	957	542
2,500 - 4,999	1,931	386
1,000 - 2,499	3,561	264
600 - 999	1,825	183
300 - 599	2,316	136
1 - 299	3,709	70

Within the three smallest enrollment size classes, the sampling rates were determined so that the desired sample size for enrollment class "i" would be obtained while oversampling poorer districts. Orshansky class "0-11.9 percent" was sampled at rate r_i , Orshansky class 12-24.9 percent was sampled at rate $1.5 r_i$, and Orshansky class "25 percent and over" was sampled at rate $2r_i$. In so doing, the sampling variability for national estimates was increased slightly while the number of sampled districts in enrollment class groups "1 to 1,000" within an Orshansky measure of "25 percent or more" was increased by 50 percent (from 62 to 102), thus increasing the likelihood of eligible districts being selected and increasing the precision of estimates based on the higher Orshansky classes. The five largest enrollment classes were sampled with equal probability of selection within a class.

Once the sample was selected, a systematic assignment of questionnaire types was made. Each consecutive grouping of three sampled districts was assigned to receive questionnaire types C, A, and B in that order throughout the list of all sampled districts. Finally, a systematic (equal probability) sample of 267 from the 2,200 sampled districts was selected for participation in the telephone survey associated with the main survey. The mail survey sample districts were arranged in selection order prior to drawing the subsample, thus assuring the representation of original stratification characteristics within the telephone survey districts as well.

Weighting Coefficients

The weights for the full sample are very straightforward. In each enrollment group/poverty group cell a systematic random sample was drawn with each district in

the cell having the same probability of selection. The probability of selection of a district in a cell is simply the number of districts sampled from the cell divided by the number of districts in the cell. The unadjusted weight is the inverse of this number. A nonresponse adjustment based on the number of nonresponding districts in a cell was slight because there was so little nonresponse. No adjustments were made for item nonresponse because individual item response rates were consistently between 85 and 95 percent.

Most data items appear in only two of the three questionnaires because it was felt that the burden on the districts would be too great if all items were asked of all districts. Questionnaire A contains some items that are common to the items on questionnaire B and another set common to questionnaire C. The questionnaires were assigned systematically to the units within a cell, so each questionnaire is a stratified, systematic sample of size one-third of the full sample.

Instrument Design

The mail survey instruments consisted of three versions (A, B, and C) of a questionnaire, containing a total of 79 items. The sample of 2,200 districts was randomly divided into three subsamples, each of which received one version of the questionnaire. Twenty-two of the items appeared on all three versions; the remaining 57 items appeared on two versions each. Thus, each item was contained in at least two, if not three, of the questionnaires; and each questionnaire was received by one-third of the sample.

The topics covered by each questionnaire are listed below:

Version A:

- o Background information
- o Selecting attendance areas, schools, and students
- o Program design
- o Program evaluation, assessment of sustained effects, and needs assessment
- o General information
- o Program management (partial)

Version B:

- o Background information**
- o Selecting attendance areas, schools, and students**
- o Parental involvement**
- o Program management**
- o General information**

Version C:

- o Background information**
- o Program design**
- o Program evaluation, assessment of sustained effects, and needs assessment**
- o Parental involvement**
- o Program management**
- o General information**

As noted earlier, a subset of items was replicated from a 1981 survey of local program administrators (Advanced Technology, 1983) to allow for comparisons over time in selected areas of interest.

As an adjunct to the mail questionnaires, a set of "key items" was prepared for each version, for administration by telephone to those districts who were unable or unwilling to respond to the complete mail questionnaire during the data collection period.

Data Collection Procedures and Response Statistics

The survey procedures included letters of notification sent to State and district offices, letters and self-administered mail questionnaires distributed to Chapter 1 Coordinators in sampled districts, postcard reminders, 20 minute key item followup to nonrespondents conducted by telephone, and telephone data retrieval.

Approximately one week before the Chapter 1 District Survey began, letters describing the nature and importance of the study were sent to State Chapter 1 liaisons. This letter included a list of all districts sampled in each liaison's State. Letters were also sent to district superintendents in all selected districts.

Postcard Prompt

Approximately 10 days after the initial mailing, all districts were sent a postcard reminder asking them to complete and return the questionnaire. The postcard provided a toll-free number and the name of the survey operations manager to contact in the event that a questionnaire had not been received by the district. Questionnaires were remailed immediately to all respondents requesting another copy.

Telephone Prompts

Telephone prompt calls were made to all districts that had not responded to the initial mailings. A response rate of 88 percent was achieved. Chapter 1 district coordinators who had not returned questionnaires were contacted to participate in a 20 minute interview of key items appearing on the original questionnaire version for which their district had been selected. These interviews increased the response rate by 11 percent, to 99 percent for key survey items. Of particular importance, key item data were obtained from some very large districts which otherwise would have been lost. Responses were evenly distributed across the three questionnaire versions.

Population Estimation Procedures

Estimates of several types, including estimates of totals, percentages and means were made for the National Survey of School Districts receiving ECIA Chapter 1. Estimates of totals were derived from weighted sums of the values reported by district officials. Percentages and means were then estimated as the ratios of two estimates of totals. The weights depended on probability of selection and on the rates of response in sample strata.

III. A STUDY OF TARGETING PRACTICES USED IN THE CHAPTER 1 PROGRAM (excerpted from the Final Report by C. T. Wood et al.)

The Targeting Study was based on case studies of thirty districts which were selected from throughout the country on the basis of the availability of needed data, district size, urbanicity, and geographic diversity. Using district size and urbanicity as the key classification variables, several sites were selected from each combination to allow for variations in poverty, location and grade level. The size categories and urbanicity definitions were analogous to those used in the District Practices Study.

The number of districts included is as follows:

Size	Urbanicity			Total
	Urban	Suburban	Rural	
Super large	4			4
Large	8	2		10
Medium	2	2	3	7
Small		2	3	5
Very small	—	<u>2</u>	<u>2</u>	<u>4</u>
Total	14	8	8	30

Potential sites were nominated through recommendations by Advisory Panel members, Chapter 1 Technical Assistance Centers, state educational agencies, and directories of school districts and Directors of Research and Evaluation. Telephone interviews were conducted with over 200 potential sites to determine how the necessary data were stored, and to ascertain descriptive information such as the grade levels served by Chapter 1, and the existence of other state compensatory programs. Detailed information was gathered regarding district-wide achievement data, the identification of Chapter 1 participants, and the identification of low-income students.

Based on the telephone interview, the potential sites were ranked as highly desirable, possible, and not adequate. The entire list of sites was examined for geographic representation. Final selections were made to reflect diversity in such characteristics as presence of state compensatory education, participation of private schools, and grades of Chapter 1 participation.

Data were collected from the thirty districts that best fitted the needs of the study in various forms - on magnetic tapes, floppy disks, and paper files. All data were transferred to the IBM-3084 mainframe computer at Stanford University. The transfer required that the data be checked for errors, compared to the documentation, and tested for duplicates. While each district's data were unique, certain information was common to all districts. This information is presented in Table A-1.

Data files for the thirty districts were constructed using the Statistical Analysis System (SAS). This required a review of the documentation provided by each district, examination of the data in their raw form, testing for inconsistencies in the data, and making decisions about what to do with "bad" data. The final list of variables available in each district is included as Table A-2.

TABLE A-1

List of Variables Requested from Each District

I. For each student currently enrolled in grades __ through __:

A. Demographic data

School enrolled for 1985-86

Grade level in 1985-86

Date of birth

Race

Sex

Limited-English-proficient. Use most recent data available. May be dichotomous variable (LEP or not LEP). May be variable with several codes (e.g., 0 = fluent English, 1 = limited English, 2 = Non-English speaker or a score on a language proficiency test).

B. Program participation in 1985-86

Chapter 1 participant. May be dichotomous variable (Chapter 1 participant or not). May be variable with several codes (e.g., 0 = not Chapter 1, 1 = Chapter 1 reading, 2 = Chapter 1 math, etc.) May be a series of dichotomous variables (e.g., participant in Chapter 1 reading program or not, participant in Chapter 1 math program or not, etc.)

Special Education program participant. May be dichotomous variable or coded by type of handicap.

State Compensatory Education Program participant

Bilingual Education Program participant

Migrant Education Program participant

C. Program participation for 1984-85

Chapter 1 participant 1984-85

D. Achievement and poverty status

Standardized test scores. Achievement test scores for spring 1985. NCEs preferred. If not NCEs, national percentile ranks. Separate scores for reading, mathematics, and language arts by subtest (e.g., vocabulary, reading comprehension, etc.) or total battery (e.g., total reading, total math, total language arts).

Poverty status. For 1984-85, participant in National Lunch Program or recipient of AFDC. May be dichotomous or may be more detailed (e.g., 0 = non-participant, 1 = free lunch, 2 = reduced price lunch).

II. For each school in the district:

Chapter 1 school 1985-86

May be dichotomous variable (e.g.

Chapter 1 school 1984-85

Chapter 1/not Chapter 1) or a list of school id codes for those schools with Chapter 1 programs.

Table A-2
Variables in the Data Base by District

	Dis- trict	Current School	Current Grade	Eth- nicity	Sex	Age	Current Ch. 1	Last Yr. Ch. 1	Current Spec. Ed.	Current Breakdowns	Current LEP	Current Breakdowns	Current State Comp. Ed.	Current Breakdowns	Current** Standardized Test Scores				Retain	Move	FRL by	
															Rdg.	Math	LA	Other			Student	Other
A-15	B2	X	X				X	reason not in, full or part	X	reason not in, full or part	X	setting	NA		X	X	X					
	C5	X	X	X	X	X	X		X		X	LD, EM not all setting	NA	X	X	X	X				X	
	E1	X	X		X	X	X	intensity	X	intensity	X		NA	X	X	X	X					
	M2	X	X	X	X	X	X	R,M,L	X	R,M,L	X		NA	X	X	X	X			X	X	
	M3	NA	X		X	X	X		X		X		NA	X	X	X	X				X	
	P1	NA	X	X	X	X	X	R,M	X	R,M	X	some HCD	NA	X	X	X	X				X	
	S5	X	X	X	X	X	X	R,M	X		X	SPM or LD	NA	X	X	X	X			X	X	
	D1	X	X	X	X	X	X	dist only has R program	X	dist only has R program	X	dummy	X	prl. lang. dummy for bil. progr.	X	X	X	X		X	X	
	S4	X	X	X	X	X	X	dummy (unusable)	X		X	dummy (unusable)	NA	LEP and bil. prgr. dummies	X	X	X	X		X	X	stu. conduct files available
	S3	1986 school	X	X	X	X	X		X	R,M,B	X				Spr 86					X	X	X 1986
	C1	X	X	X	X	X	X	R,M	X	R,M,B	X	type of hcsp SC or	X	dummy	X	X				X	X	
	B1	X	X		X		X	dummy	X		X	resource room	X	dummy	X	X	X	X		X	X	gifted
	L2	X	X	X	X	X	X	R,M	X	R,M,B	X	type of hcsp	NA		X	X	X	X		X	X	teacher rating for R & M
	S1	X	X	X	X	X	X	R,M	X	R,M,B	X	type of hcsp	NA		X	X	X	X		X	X	
	C1	X	X	X	X	X	X	R,M	X	R,M,B	X	type of service	X	R,M,B	X	X	X	X		X	X	
	S2			X	X	X	X		X	R,M,B	X	dummy	NA		X	X	X	X		X	X	gifted
	H2	X	X	X	X	X	X	R,M,BASIC,ECI	X	dummy		received	NA		X	X	X	X		X	X	attendance, teacher rating chr, CHI chr rating; composite rating score
	L1	X	X	X	X	X	X	R,M	X	dummy	X	type of serv. X	X	prl. lang. LEP and bil. progr.	X	X	X	X		X	X	gifted
	M1	X	X	X	X	X	X	R,M	X	R,M,B	X	type of hcsp X	X	2,M,B	X	X	X	X		X	X	gifted migrant
	C2	X	X	X	X	X	X	dummy			X	dummy	NA		X	X	X	X				
	O1	X	X	X	X	X	X	dummy detailed, incl. R,M	X	R,M	X	type of hcsp X	NA		X	X	X	X				
	R1	X	X	X	X	X	X	R,M,BIL,ESL	X	R,M,BIL,ESL	X	type of serv. X	X	LEP and bil. prgr.	X	X	X				X	attendance
	D2	X	X	X	X	X	X	dummy	X	dummy		type of HCAP	X		X	X						
	H1	X	X		X	X	X	dummy			X	type of HCAP X	NA		X	X						
	P2	X	X	X	X	X	X	R,M,L			X	type of HCAP X	NA		X	X	X					
	C4		X	X	X		X	dist only has R program							X	X	X	X				
	S6	X	X	X	X	X	X	R,M	X	R,M	X	type of HCAP	NA		X	X	X	X			X	teacher rating R,M selection score
	O2	X	X	X	X	X	X	R,M	X	R,M	X	dummy	NA		X	X	X					
	J1	NA	X	X	X	X	X	R,M	X	R,M	NA				X	X	X			X		
	J2	X	X	X	X	X	X	dummy			X	type of HCAP X	NA		X	X	X	X			X	Indian aid progr., migrant

*For most districts, the "current" year is 1985-86, and "last" year is 1984-85. For district D2 and C1, "current" is 1984-85, and "last" is 1983-84.
**Test scores used for "current" year Chapter 1 selection.

APPENDIX B
SUPPORT TABLES FOR FIGURES AND TABLES

SUPPORT TABLE FOR FIGURE 1

**Presence of Special Education Services for Mildly Handicapped
Students and Chapter 1 in Public Elementary Schools
by School Poverty Quartile, 1985-86**

School Poverty Quartile	Percent of Schools			
	Mildly Handicapped	Standard Error	Chapter 1	Standard Error
Lowest (0 - 15 percent poor)	83	3.5	57	6.4
2nd Lowest (15.1 - 30 percent poor)	85	3.6	76	4.9
2nd Highest (30.1 - 50 percent poor)	84	3.5	86	4.2
Highest (50.1 - 100 percent poor)	91	2.5	87	3.3

N = 168 (sample of public elementary schools in the lowest poverty quartile),
147 (public elementary schools in the second lowest poverty quartile),
160 (public elementary schools in the second highest poverty quartile),
197 (public elementary schools in the highest poverty quartile). Table
values are based on weighted data.

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

SUPPORT TABLE FOR FIGURE 2

**Presence of Special Education Services for Mildly Handicapped
Students and Chapter 1 Programs in Public Elementary
Schools by School Urbanicity, 1985-86**

School Urbanicity	Percent of Schools			
	Mildly Handicapped	Standard Error	Chapter 1	Standard Error
Urban	88	2.8	78	1.9
Suburban	89	2.2	57	2.3
Small town	83	4.6	87	1.5
Rural	77	5.6	93	1.2

N = 198 (sample of public elementary schools in urban areas), 284 (public elementary schools in suburban areas), 97 (public elementary schools in small towns), 83 (public elementary schools in rural areas). Table values are based on weighted data.

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

SUPPORT TABLE FOR FIGURE 3

**Percent of Public Elementary Schools Offering
Special Education Services for MH Students
and Chapter 1 Programs by Grade, 1985-86**

Grade	Percent of Schools			
	Mildly Handicapped	Standard Error	Chapter 1	Standard Error
K	36	2.3	28	2.9
1	73	2.1	83	2.4
2	80	1.9	97	1.2
3	87	1.6	93	1.6
4	86	1.6	93	1.6
5	87	1.6	86	2.2
6	82	1.8	80	2.5

N = 682 (sample of public elementary schools). Table values are based on weighted data.

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

SUPPORT TABLE FOR FIGURE 4

**Median Percent of Public Elementary Students Receiving
Special Education Services for Mildly Handicapped
Students and Chapter 1 Services by Grade
as Reported by School Principals, 1985-86**

Median Percent of Enrollment				
Grade	Mildly Handicapped	Standard Error	Chapter 1	Standard Error
K	0	--	0	--
1	3	0.6	20	3.2
2	4	0.5	24	2.4
3	6	0.6	22	2.5
4	6	0.5	22	2.4
5	7	0.7	19	2.6
6	5	0.8	16	2.7

N = 682 (sample of public elementary schools). Table values are based on weighted data.

Source: Survey of Schools conducted for the Chapter 1 National Assessment, 1985-86.

SUPPORT TABLE FOR TABLE 1

Selection Procedures for MH and Chapter 1 Programs, 1985-86

	Percent of Schools			
	Mildly Handicapped	Standard Error	Chapter 1	Standard Error
Standardized test scores	84	1.8	97	1.2
English proficiency test scores	31	2.2	22	2.6
Other measures (e.g., diagnostics, aptitude, intelligence tests)	98	0.7	59	3.1
Classroom teacher recommendation	88	1.5	86	2.2
Special teacher recommendation	82	1.8	51	3.2
Parent request	76	2.0	53	3.2
All students participate	N/A ^{a/}		1	0.7

^{a/} This option is not available for mildly handicapped students.

N = 552 (MH), 364 (Chapter 1)

Source: Survey of Schools conducted for the National Assessment of Chapter 1, 1985-86.

Table reads: 84 percent of elementary school principals report using test scores to select students for MH services compared to 97 percent who use test scores to select Chapter 1 participants.

SUPPORT TABLE FOR TABLE 2

Settings for Special Education Services for Mildly Handicapped Students

Percent of Principals Responding

	School Poverty Quartile													
	Overall		Schools		Schools		Lowest		2nd Lowest		2nd Highest		Highest	
			Standard	With	Standard	With No	Standard	Lowest	Standard	2nd Lowest	Standard	2nd Highest	Standard	Highest
		Error	Chapter 1	Error	Chapter 1	Error	0 - 15%	Error	15.1 - 30%	Error	30.1 - 50%	Error	50.1% +	Error
Self-contained classroom	37	2.3	38	3.3	34	3.4	26	4.2	38	4.9	35	4.7	50	4.4
Resource room	85	1.7	84	2.5	86	2.5	87	3.3	82	3.9	88	3.2	82	3.4
Inside regular classroom	52	2.4	52	3.4	54	3.6	49	4.8	63	4.9	47	4.9	53	4.4

N = 552

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Table reads: 37 percent of public elementary schools provide Special Education services in self-contained classrooms.

Note: Percentages do not sum to 100 because principals could choose more than one setting.

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

Support Table for Table 2 (continued)

	School Urbanicity							
	Urban	Standard Error	Suburban	Standard Error	Small Town	Standard Error	Rural	Standard Error
Self-contained classroom	51	4.3	39	3.6	37	6.2	15	5.3
Resource room	84	3.1	84	2.7	85	4.6	85	5.2
Inside regular classroom	40	4.2	54	3.7	63	6.2	47	7.4

N = 552

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Table reads: 37 percent of public elementary schools provide Special Education services in self-contained classrooms.

Note: Percentages do not sum to 100 because principals could choose more than one setting.

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

SUPPORT TABLE FOR TABLE 3

Characteristics of MH and Chapter 1 Instructional Services
as Reported by Teachers, 1985-86

	Mildly Handicapped				Chapter 1			
	Reading	Standard Error	Math	Standard Error	Reading	Standard Error	Math	Standard Error
Median number of students per teacher	11	0.6	10	0.7	27	2.5	19	1.5
Median size of instructional group	3	0.3	3	0.4	5	0.4	5	0.6
Median days per week	5	0.1	5	0.1	5	0.0	5	0.0
Median minutes per day	45	3.4	45	1.7	35	5.0	30	2.5

N = 539 (MH), 676 (Chapter 1).

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Table reads: The median number of MH reading students per teacher is 11, MH math students is 10; the median number of Chapter 1 reading students per teacher is 27, Chapter 1 math students is 19.

SUPPORT TABLE FOR TABLE 4

**MH and Chapter 1 Teachers Reports of the Purpose of MH
and Chapter 1 Instruction, 1985-86**

	Percent of Teachers			
	Mildly Handicapped	Standard Error	Chapter 1	Standard Error
Introduce new material	20	2.4	6	1.4
Reinforce material taught in the regular classroom	68	2.8	91	1.7
Both	9	1.7	3	1.0

N = 539 (MH), 567 (Chapter 1)

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Note: Percentages for MH teachers do not sum to 100 because of those who did not respond to the question.

Table reads: 20 percent of MH teachers report that the main purpose of MH instruction is to introduce new material not taught in the regular classroom.

SUPPORT TABLE FOR TABLE 5

Use of Aides by Teachers of MH Students, Chapter 1 Teachers and Regular Classroom Teachers

	School Poverty Quartile													
	Overall	Standard Error	Schools With Chapter 1	Standard Error	Schools With No Chapter 1	Standard Error	Lowest 0 - 15%	Standard Error	2nd Lowest 15.1 - 30%	Standard Error	2nd Highest 30.1 - 50%	Standard Error	Highest 50.1% +	Standard Error
MH	54	2.9	53	4.3	58	4.4	55	6.3	57	5.9	48	6.2	55	5.4
Chapter 1	52	3.0					50	4.8	54	9.2	43	7.7	64	6.0
Regular classroom	27	2.5	26	3.2	29	4.0	25	5.2	20	5.1	22	4.9	41	5.1

N = 539 (MH), 507 (Chapter 1), 599 (regular).

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

Table reads: 54 percent of the teachers of mildly handicapped students report having the assistance of aides in the classroom.

Support Table for Table 5 (continued)

	School Urbanicity							
	Urban	Standard Error	Suburban	Standard Error	Small Town	Standard Error	Rural	Standard Error
MH	50	5.2	57	4.5	62	7.7	41	9.7
Chapter 1	70	4.8	37	6.4	55	7.1	36	7.1
Regular classroom	39	5.2	22	3.9	26	6.4	25	6.8

N = 539 (MH), 507 (Chapter 1), 599 (regular).

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

Table reads: 54 percent of the teachers of mildly handicapped students report having the assistance of aides in the classroom.

SUPPORT TABLE FOR TABLE 6

Teachers' Educational Attainment and Years of Experience in Teaching, 1985-86

	Mildly Handicapped	Standard Error	Chapter 1	Standard Error	Regular	Standard Error
Degree						
Bachelor's	17	2.2	21	3.3	19	1.9
Bachelor's +	24	2.5	28	2.5	35	3.7
Master's	41	2.9	36	2.8	31	3.9
Beyond Master's	18	2.3	15	2.6	14	2.0
Years of Experience						
1 - 5	21	2.4	15	2.0	12	1.8
6 - 10	32	2.7	22	2.4	19	2.2
11 - 20	37	2.8	43	2.9	49	2.8
Beyond 20	10	1.8	20	2.3	20	2.2
Specialist Credentials						
Reading	5	1.3	29	2.6	8	1.5
Special Education	58	2.9	4	1.1	5	1.1
Other	40	2.9	13	2.0	20	2.2
None	15	2.1	58	2.8	70	2.6

N = 492 (MH), 567 (Chapter 1), 599 (Regular).

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Table reads: 17 percent of teachers of mildly handicapped students have only a Bachelor's degree, 21 percent of Chapter 1 teachers have only a Bachelor's degree, and 20 percent of regular classroom teachers have only a Bachelor's degree.

SUPPORT TABLE FOR TABLE 7

Instructional Characteristics of MH Reading Programs by Chapter 1
Status, Poverty and Urbanicity of the School, 1985-86

	School Poverty Quartile											
	Schools With Chapter 1	Standard Error	Schools With No Chapter 1	Standard Error	Lowest 0 - 15%	Standard Error	2nd Lowest 15.1 - 30%	Standard Error	2nd Highest 30.1 - 50%	Standard Error	Highest 50.1% +	Standard Error
Median number of students	12	0.8	11	1.2	12	2.2	11	1.9	12	1.3	11	0.7
Median size of instructional group	3	0.3	3	0.4	2	0.4	3	0.3	3	0.5	4	1.0
Median days per week	5	0.1	5	0.1	5	0.1	5	0.1	5	0.1	5	0.1
Median minutes per day	45	5.7	45	7.0	45	9.9	45	5.3	45	6.4	47	7.3

N = 539

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

Table reads: The median number of MH reading students in schools with Chapter 1 is 12, and in schools with no Chapter 1 program is 11.

Support Table for Table 7 (continued)

	School Urbanicity							
	Urban	Standard Error	Suburban	Standard Error	Small Town	Standard Error	Rural	Standard Error
Median number of students	12	1.1	11	1.0	13	2.3	11	1.6
Median size of instructional group	3	0.7	3	0.4	3	0.6	3	1.2
Median days per week	5	0.1	5	0.1	5	0.2	5	0.2
Median minutes per day	50	6.8	45	7.3	45	9.1	30	5.9

N = 539

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

Table reads: The median number of MH reading students in schools with Chapter 1 is 12, and in schools with no Chapter 1 program is 11.

SUPPORT TABLE FOR TABLE 8

Instructional Characteristics of Chapter 1 Reading Programs by Poverty,
and Urbanicity of the School, 1985-86

	School Poverty Quartile								School Urbanicity							
	Lowest 0 - 15%	Standard Error	2nd Lowest 15.1 - 30%	Standard Error	2nd Highest 30.1 - 50%	Standard Error	Highest 50.1% +	Standard Error	Urban	Standard Error	Suburban	Standard Error	Small Town	Standard Error	Rural	Standard Error
Median number of students	21	5.1	28	6.3	31	9.2	35	4.1	32	4.3	21	7.2	24	6.4	33	4.5
Median size of instructional group	4	0.3	5	1.0	4	1.0	5	1.0	5	0.8	4	0.5	5	0.6	4	0.7
Median days per week	5	0.2	5	0.2	5	0.2	5	0.1	5	0.1	5	0.2	5	0.2	5	0.2
Median minutes per day	32	6.6	30	1.7	30	6.5	45	2.3	45	2.1	30	3.3	30	5.3	30	6.6

N = 676

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Note: School poverty classifications are based on principals' reports of the percent of students who were eligible for free or reduced price lunches during the 1985-86 school year. Numbers are for public schools only.

Table reads: The median number of Chapter 1 reading students in schools in the lowest poverty quartile is 21.

SUPPORT TABLE FOR TABLE 9

Characteristics of MH Programs in Rural Schools and Nationally, 1985-86

	Rural Median	Standard Error	National Median	Standard Error
Setting				
Resource Room	85	5.2	85	1.7
In-class	47	7.4	52	2.4
Self-contained class	15	5.3	37	2.3
Minutes of Instruction				
Reading	30	5.9	45	3.4
Math	30	7.4	45	1.7
MH Teachers' Years of Experience				
1 - 5	42	9.8	21	2.4
6 - 10	24	8.4	32	2.7
11 - 20	28	8.9	37	2.8
Beyond 20	6	4.6	10	1.8
MH Teachers' Educational Attainment				
Bachelor's	25	8.5	17	2.2
Bachelor's +	16	7.3	24	2.5
Master's	42	9.8	41	2.9
Beyond Master's	17	7.5	18	2.3
MH Teachers' Specialist Credentials				
Special Education	48	9.9	58	2.9
Reading	1	2.4	5	1.3
Other	38	9.6	40	2.9
None	28	8.9	15	2.1

N = 48 (Rural), 539 (National)

Source: Survey of Schools conducted for Chapter 1 National Assessment, 1985-86.

Table reads: 85 percent of rural schools use resource rooms for their MH student instruction, 52 percent use in-class instruction, and 15 percent use self-contained classrooms; the national medians are 85 percent use resource rooms, 47 percent use in-class instruction, and 37 percent use self-contained classrooms.

Standard Errors for Text Citations

The following are standard errors for text citations that do not appear in tables in the report.

Page	Descriptor	Estimate	Standard Error
5	Percentage of teachers of mildly handicapped students indicating the most common handicapping condition is:		
	learning disability	71.2%	2.7
	emotional disturbance	8.9%	1.7
	mild retardation	7.6%	1.6
	speech	6.6%	1.5
	other health impaired and blind	5.1%	1.3
6	Percentage of public elementary schools which provide special education services for students with mild handicaps	84.8%	1.7
6	Percentage of public elementary schools that provide Chapter 1 services	75.4%	2.4
6	Percentage of public elementary schools with both mildly handicapped services and Chapter 1	65.0%	2.2
6	Percentage of public elementary schools with students participating in both MH and Chapter 1 program	41.6%	2.3
8	Percentage of districts receiving Chapter 1 which also report providing special programs for handicapped pupils	77.6%	2.0
8 note	Percentage of all districts in the nation receiving Chapter 1 funds	93.2%	1.2
13	Median percentage of students enrolled in mildly handicapped programs overall	7.0%	0.4
18	Percentage of Chapter 1 districts which rely on teachers to nominate students for testing to determine their eligibility	54.0%	1.1
20	Percentage of Chapter 1 districts which have policies to allow mildly handicapped students to be selected to receive Chapter 1 services	56.0%	2.4

Page	Descriptor	Estimate	Standard Error
20	Percentage of Chapter 1 districts which do not serve mildly handicapped children in Chapter 1 programs	31.6%	2.3
20	Percentage of districts which use exclusion policies for students with physical handicaps	6.6%	1.2
20	Percentage of public elementary school principals who report that there are students in their schools receiving both mildly handicapped services and Chapter 1	41.6%	2.3
20	Percentage of teachers of mildly handicapped students who report that they have students who receive both mildly handicapped services and Chapter 1	6.2%	2.1
20	Percentage of Chapter 1 teachers who report that they have students who receive both mildly handicapped services and Chapter 1	36.3%	3.0
21	Percentage of teachers of mildly handicapped students who meet with Chapter 1 teachers to discuss the instructional needs of dually served students	67.6%	4.0
21	Percentage of Chapter 1 teachers who meet with teachers of mildly handicapped students to discuss the instructional needs of dually served students	74.6%	2.7
21	Percentage of teachers of mildly handicapped students who report developing joint lesson plans with Chapter 1 teachers for their dually served students	34.8%	4.1
21	Percentage of Chapter 1 teachers who report developing joint lesson plans with teachers of mildly handicapped students for their dually served students	36.9%	3.0
21	Percentage of public elementary school principals who report having dually served students and report using the same curriculum in Chapter 1 and mildly handicapped programs	30.2%	2.2
21	Percentage of teachers of mildly handicapped students who report developing joint lesson plans with regular classroom teachers	50.2%	3.0

Page	Descriptor	Estimate	Standard Error
21	Percentage of teachers of mildly handicapped students who meet with regular classroom teachers to discuss instructional needs of mildly handicapped students	95.5%	1.2
22	Percentage of Chapter 1 teachers who report developing joint lesson plans with regular classroom teachers	59.6%	2.8
22	Percentage of Chapter 1 teachers who meet with regular classroom teachers to discuss instructional needs of Chapter 1 students	91.5%	1.6
22	Percentage of Chapter 1 teachers who report having students who complete special education services and go into Chapter 1	63.1%	3.0
22	Percentage of Chapter 1 teachers who report having students who complete Chapter 1 and go into special education services	50.0%	3.1
23	Percentage of principals at public elementary schools with Chapter 1 programs reporting use of pull-out models for reading instruction	84.0%	2.1
23	Percentage of principals at public elementary schools with Chapter 1 programs reporting use of in-class models for reading instruction	28.0%	2.6